May 2026

Institute for Energy Economics and Financial Analysis

Redirecting sovereign capital to accelerate Indonesia's energy transition

Embedding clean energy into Danantara's investment portfolio is essential for Indonesia's fiscal resilience

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Key findings

Indonesia's sovereign wealth fund (SWF), Danantara, ranks as the eighth-largest fund globally, with USD900 billion in assets under management. However, its dividend model is structurally constrained: state-owned enterprise (SOE) contributions have consistently fallen short of the government's ambitious annual target of IDR800 trillion (USD46.7 billion).

The financial performance of energy SOEs remains heavily dependent on government support. Government subsidies and compensation for Pertamina and PLN totaled IDR374 trillion (USD23.6 billion) — more than double the SOE dividend contributions. Without this support, both companies would record negative net income, diminishing their dividend capacity.

Pertamina and PLN are predominantly fueled by coal and imported oil and gas, exposing them to global price volatility and exchange rate fluctuations. Renewables, by contrast, are domestically available, have no fuel costs, and are not linked to currency fluctuations, offering a pathway to greater financial stability.

International SWF experience demonstrates that embedding sustainability in portfolio strategy ensures resilience, long-term value creation, and alignment with global decarbonization trends, while collaboration with regional actors can mobilize the scale of investment required to accelerate Indonesia's energy transition goals.

Executive summary

Established on 24 February 2025, Indonesia's sovereign wealth fund (SWF), Badan Pengelola Investasi Daya Anagara Nusantara (Danantara), is mandated to enhance state revenue and strengthen the national economy through professional portfolio and investment management. A key component of its revenue model is optimizing returns from state-owned enterprises (SOEs), primarily through dividends and the active management of SOEs.[1] With approximately USD900 billion in assets under management, Danantara ranks as the world's eighth-largest SWF, placing it among the most significant global players.

Globally, countries have established SWFs as a way to manage national wealth prudently, stabilize economies during downturns, secure long-term prosperity, and invest in national priorities. Their funding typically comes from four sources: oil and natural gas, other export commodities, fiscal surpluses, and foreign exchange reserves.[2]

In contrast, Danantara's funding model is not reliant on these sources and is primarily from consolidated dividends of SOEs that were previously absorbed by the State Treasury and supported by market-based instruments.[3]

A year after Danantara's launch, President Prabowo set an annual dividend target of IDR800 trillion (USD46.7 billion) for the state budget[4] alongside a minimum return of 5%.[5] With total current assets of USD900 billion, a 5% return would generate USD45 billion annually for the government.

Historically, dividends from SOEs have fallen short of this target. In 2022, SOEs' consolidated assets of IDR9,789 trillion generated net profits of IDR309 trillion (a 3.15% return on assets [ROA]) and paid dividends of around IDR78 trillion. As the largest shareholder, the Government of Indonesia (GOI) received dividends totaling IDR40 trillion. In 2024, total dividends increased to IDR145 trillion, with GOI receiving IDR85 trillion. However, even that growth remains far below the stated target, underscoring a structural challenge in achieving fiscal expectations.

To meet the government's ambitious goal, Danantara should pursue complementary strategies through its two holding entities:

- Danantara Asset Management (DAM) should optimize SOEs' performance to deliver stronger dividends.
- Danantara Investment Management (DIM) should reinvest available capital from SOE dividends and other proceeds into projects that can generate returns exceeding the 5% minimum rate, starting with the IDR150 trillion from government injections, dividends, and patriot bonds.

[1] Ministry of Finance. Mengenal Danantara. 20 March 2025.
[2] International Monetary Fund. Investment Objectives of Sovereign Wealth Funds—A Shifting Paradigm. January 2011.
[3] Danantara Indonesia. Danantara Indonesia Diaries Issue 13 – Sovereign Funds. 4 November 2025.
[4] Kompas. A Year into Danantara, President Prabowo Targets Annual Asset Returns of IDR 800 Trillion. 11 March 2026.
[5] MSN. Dari dividen hingga investasi, mampukah Danantara capai target Rp 800 T Prabowo? 17 March 2026.

Notably, dividend contributions are highly concentrated among the country's seven leading SOEs (known as the "Magnificent 7"[6]), with the banking sector as the primary contributor, followed by the energy sector. However, the financial performance of energy SOEs remains heavily dependent on government subsidies, revealing a critical paradox — government compensation to energy SOEs exceeds the dividends they generate.

In 2024, subsidies and compensation to state-owned oil and natural gas corporation Pertamina and national electricity utility PT Perusahaan Listrik Negara (PLN) totaled IDR374 trillion (USD23.6 billion) — more than double the dividends distributed by the country's seven largest SOEs. This dynamic raises questions about the feasibility of scaling dividends to meet Danantara's targets without increasing subsidies or undertaking SOE reforms. Scenario analysis indicates that in the absence of subsidies, the energy sector would generate substantial losses, potentially offsetting dividend contributions from other SOEs. This highlights a key vulnerability in Danantara's revenue model.

Against this backdrop, the energy sector holds significant potential for reform. Pertamina and PLN are highly exposed to global price volatility because they are heavily dependent on conventional energy sources, such as coal, oil, and gas. Government intervention that regulates domestic fuel costs and caps prices at below international levels erodes profit margins, prevents full value capture, and exacerbates operational inefficiencies and fiscal pressures.

Comparative analysis of global SWFs offers valuable insights. Funds in Norway and the Gulf region demonstrate how oil resource rents can be converted into sustainable, diversified investments. Meanwhile, Singapore's Temasek illustrates how active asset management and global diversification can strengthen domestic resilience.

Clean energy has emerged as a defining investment alternative. Since surpassing fossil fuels in 2019, global SWF investment in renewables rose by 11% in 2024, reaching USD2.1 trillion — double that of fossil fuels. Renewables accounted for more than 92% of global power capacity expansion in 2024, primarily driven by solar and wind.

SWFs are expanding beyond renewable generation assets to encompass networks and grids, energy storage, and green technology supply chains. Their portfolios increasingly include electric vehicles (EVs), sustainable agriculture, recycling, and other transition-related sectors, reflecting a holistic approach to sustainability.

These models emphasize the importance of portfolio diversification, operational efficiency, and sustainability principles that Danantara should adopt to avoid financial risks. Global experiences provide a roadmap for a long-term, sustainability-oriented investment strategy that prioritizes resilience over short-term fiscal targets. Temasek's practices demonstrate that sustainability should be embedded in portfolio strategy, ensuring resilience, long-term value creation, alignment with global decarbonization trends, and simultaneously strengthening national energy security. Additionally, regional collaboration is essential. Partnerships with actors across the Association of

[6] Kompasiana. Catatan Perjalanan Danantara: Kisah tentang Rencana Besar, Langkah Awal, dan Implikasinya bagi Indonesia. 27 August 2025.

Southeast Asian Nations (ASEAN) actors can provide an important starting point, while collaboration with SWFs from the Middle East and North Africa (MENA) and East Asia regions could unlock the scale of investment required to accelerate Indonesia's energy transition goals.

Danantara's directives to optimize SOE assets through DAM and strengthen global partnerships through DIM provide institutional mechanisms for reform. These initiatives align with Indonesia's Golden Vision 2045 to achieve economic sovereignty, social welfare, and sustainable development goals. Crucially, they also strengthen Indonesia's efforts to achieve energy security and an 8% economic growth target. However, the path forward requires balancing ambition with strategic actions.

Table 1: Strategic actions for Danantara to enhance asset and investment management

Strategic Action		Key Recommendation
	Driving Portfolio Diversification into Renewables	Danantara should encourage SOEs, particularly PLN, to expand into solar, wind, and battery storage as these technologies typically deliver lower operating costs, stronger margins, and can generate revenue within two years.
	Accelerating Electric Vehicle (EV) Ecosystems	Danantara can invest in three key areas: battery manufacturing and recycling, charging infrastructure expansion, and public transport electrification, particularly buses and logistics fleets, to reduce fuel subsidies while mitigating urban emissions.
	Enabling Carbon Market Solutions	Danantara can play a catalytic role in advancing credible carbon markets by purchasing carbon credits to offset portfolio emissions, investing in high-integrity carbon reduction projects, and advocating for transparent, liquid, and credible carbon markets. Drawing on Temasek's example, Danantara could also drive internal change by applying an internal carbon price across its portfolio. It could also collaborate with Temasek to accelerate coal retirement by leveraging transition credits.
	Establishing Climate Financing Platforms	Danantara should leverage existing blended finance mechanisms, such as the Just Energy Transition Partnership (JETP), and expand into green bonds.
	Integrating Transmission Infrastructure for Clean Energy	Scaling renewable energy requires robust infrastructure. Investment in grid upgrades, transmission expansion, and cross-border interconnections will be important to reduce bottlenecks, enable efficient renewable integration, and foster renewable energy investment opportunities.
	Tailored Transition Planning	Danantara could adopt a differentiated transition strategy to assess each portfolio company's preparedness for decarbonization.

Source: IEEFA.

Ultimately, Danantara's success will depend not on the scale of its assets, but on the financial efficiency of its portfolio and the sustainability of its revenue model. If Indonesia can reorient its SOE ecosystem toward profitability and resilience, Danantara could emerge as both a cornerstone of fiscal stability and a catalyst for the country's clean energy transition.

Unlocking Indonesia's Golden Vision 2045 through Danantara

Indonesia's largest sovereign wealth fund (SWF), Danantara, was established on 24 February 2025 under Law No. 1/2025. It is a strategic investment authority mandated to optimize and manage state assets, enhance investment value and productivity, act as a strategic global partner in portfolio development, and support national development programs. The fund is expected to strengthen the national economy, improve social welfare, and reinforce economic sovereignty by increasing non-tax state revenue, particularly through dividends.[7]

Before Danantara's establishment, the Indonesia Investment Authority (INA), launched in 2021, was the country's first SWF. Danantara has broader responsibilities than INA, which primarily focuses on attracting and allocating capital across five strategic sectors. In contrast, Danantara not only allocates capital but also actively optimizes national assets, particularly state-owned enterprises (SOEs). This includes engagement with portfolio companies to improve performance and asset utilization across several sectors.[8]

Countries have established SWFs as a way to manage surplus capital, aiming to preserve wealth for future generations.[9] The history of SWFs stretches over seventy years, with various examples shaping the global landscape:

- Kuwait Investment Authority (KIA) (1953): Widely recognized as the world's first SWF, KIA was created with a mandate to invest surplus oil revenues into diversified investments, ensuring that Kuwait's prosperity would extend beyond its single finite resource.[10]
- Saudi Arabia's Public Investment Fund (PIF) (1971): Established to strengthen and diversify the country's economy, the PIF has grown into one of the most influential SWFs globally, playing a central role in Saudi Arabia's Vision 2030 strategy.[11]
- Singapore's Temasek (1974) and Government of Singapore Investment Corporation (GIC) (1981): These pioneering funds were designed to manage state capital and foreign reserves, investing globally across sectors to earn a spread over their cost of capital in the long term and to diversify the country's reserves[12], enhancing national economic resilience and growth.

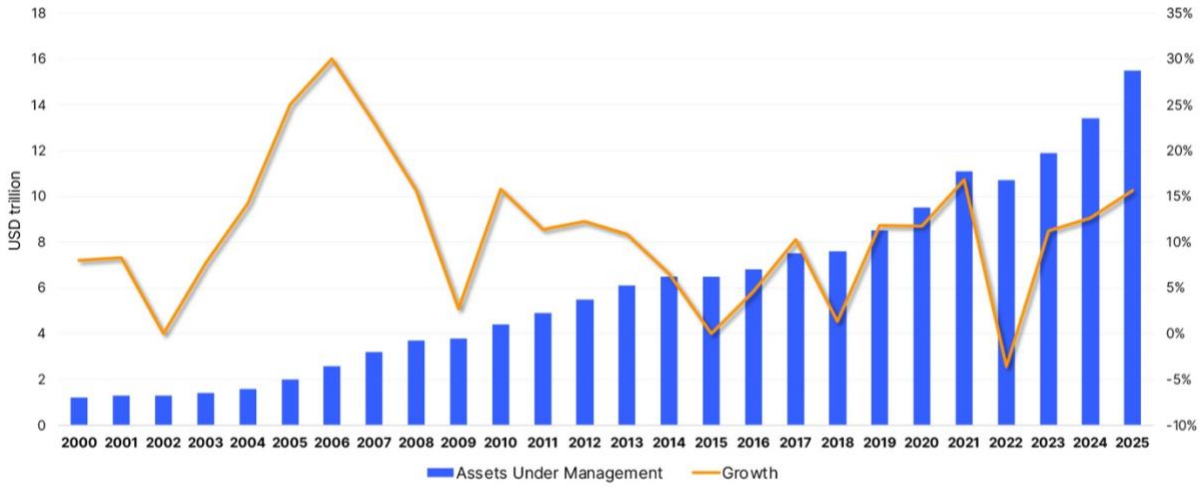
[7] Ministry of Finance. Mengenal Danantara. 20 March 2025.
[8] Bloomberg Technoz. Sama-sama SWF, Ini Perbedaan Mendasar Danantara INA. 19 November 2024.
[9] Joint SDG Fund. Sovereign Wealth Funds and the UN: Imagining a New Frontier for Global Development. 21 September 2025.
[10] Kuwait Investment Authority. About KIA.
[11] Public Investment Fund. Chaired by HRH Crown Prince, PIF Board of Directors approves PIF 2026-2030 strategy. 15 April 2026.
[12] Euromoney. Asia sovereign wealth funds: Lifting the lid on Singapore's GIC. 9 May 2019.

- Abu Dhabi Investment Authority (ADIA) (1976): Established when Abu Dhabi was at an early development stage to invest funds on behalf of the Government through a strategy focused on long-term value creation[13], ADIA is now one of the largest SWFs among the Gulf countries.
- Norway's Government Pension Fund Global (GPFG) (1990): Funded by revenues from North Sea oil to shield the economy from oil revenue swings[14], GPFG has become the largest SWF in the world, renowned for its transparency, ethical investment guidelines, and long-term sustainability focus.
- Alaska Permanent Fund (1980s): A unique example from the United States (US) at the sub-sovereign level, this fund channels the country's wealth into investments and distributes annual dividends directly to residents. Alaskans have received dividends since 1980[15] with USD1,000 paid to each resident in 2025.[16] The Alaska Permanent Fund is an example of how SWFs can convert resource wealth into household prosperity.

The number of SWFs has grown steadily over recent decades, with a significant surge between 2000 and 2019, when 144 new SWFs were established — more than double the previous total. From 2020 to 2025, an additional 38 SWFs were launched, bringing the global total to 250 funds.[17] The total value of assets under management (AUM) has also increased annually. After a slight decline from USD11.1 trillion in 2021 to USD10.7 trillion in 2022, total AUM increased to USD11.9 trillion in 2023 and reached USD15.5 trillion in January 2026.[18]

[13] ADIA. Purpose. Accessed on 17 April 2026.
[14] Norges Bank Investment Management. About the Fund.
[15] Earth4All. The Alaska Permanent Fund: A model for a Universal Basic Dividend? 4 April 2024.
[16] Department of Renevue. Department of Revenue Announces 2025 Permanent Fund Dividend Amount. 22 September 2025.
[17] Statista. Number of Sovereign Wealth Funds (SWFs) established worldwide per decade from 1940 to 2025. January 2026.
[18] Statista. Assets under management (AUM) of sovereign wealth funds (SWFs) worldwide from 2000 to January 2026. January 2026.

Figure 1: Assets under management (AUM) of sovereign wealth funds (SWFs) worldwide, 2000–2025



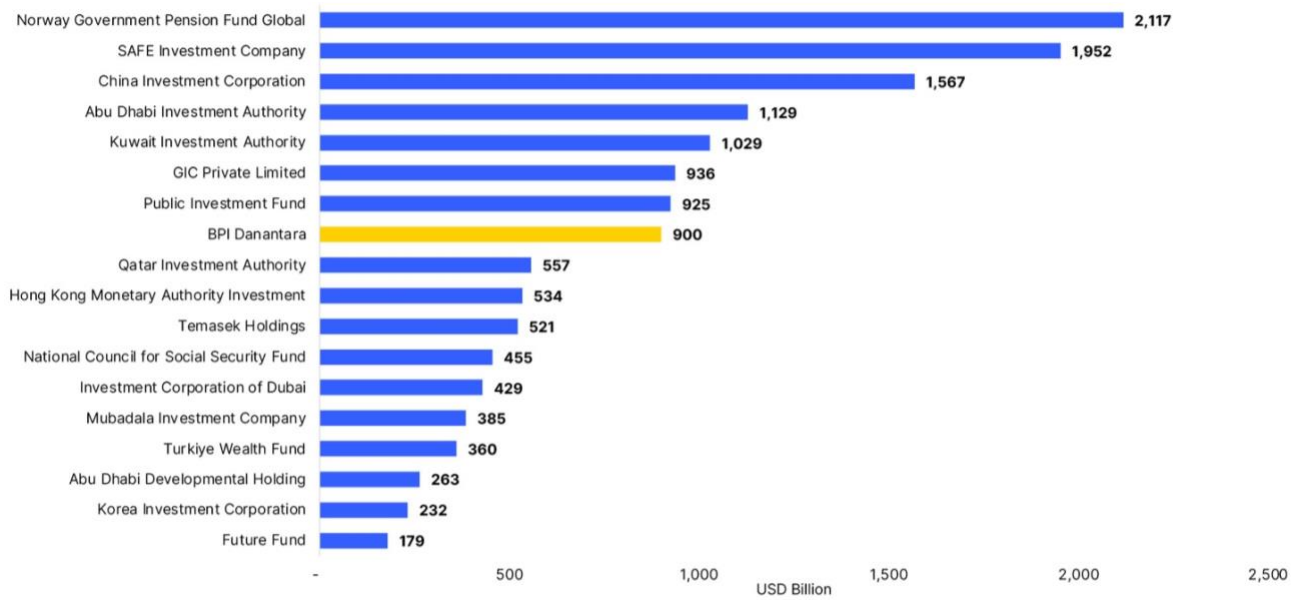
Source: Statista; Global SWF.

As of January 2026, the Middle East and North Africa (MENA) region accounted for the largest share of AUM, with SWFs managing over USD5.97 trillion, surpassing all other regions. Asia followed closely, with AUM totaling around USD5.82 trillion.[19]

On an individual fund basis, Norway's GPFG is the world's largest, with assets worth USD2.12 trillion. It is followed by China's State Administration of Foreign Exchange (SAFE) at USD1.95 trillion and the China Investment Corporation (CIC) at USD1.56 trillion. The ADIA ranks fourth, overseeing USD1.18 trillion in assets. Meanwhile, Danantara is the world's eighth-largest SWF, managing assets worth approximately USD900 billion. This scale places Indonesia's fund among the most significant global players.

[19] Statista. Assets under management (AUM) of sovereign wealth funds (SWFs) worldwide as of January 2026, by region. 3 March 2026.

Figure 2: Assets under management (AUM) of sovereign wealth funds (SWFs) worldwide, 2025



Source: Sovereign Wealth Fund Institute.

Danantara's funding model and strategic mandate

Globally, SWFs are typically classified as stabilization funds, savings funds, pension reserve funds, or reserve investment corporations. Their funding sources fall into four categories: oil and natural gas, other export commodities, fiscal surpluses, and foreign exchange reserves.[20]

Danantara's model differs from most SWFs and is not based on the typical financing sources. Instead, it relies primarily on consolidated dividends from SOEs, which were previously directed to the State Treasury, alongside market-based instruments.[21] At inception, the government injected IDR300 trillion from the state budget and confiscated assets.[22] Subsequently, Danantara received approximately IDR150 trillion (USD9.2 billion) in dividends.[23] In October 2025, the fund issued "patriot bonds" worth IDR51.75 trillion (USD3 billion).[24] However, government capital injections and debt instruments are not expected to serve as the primary funding sources. Instead, dividend income from SOEs is projected to be the principal and most sustainable revenue stream.

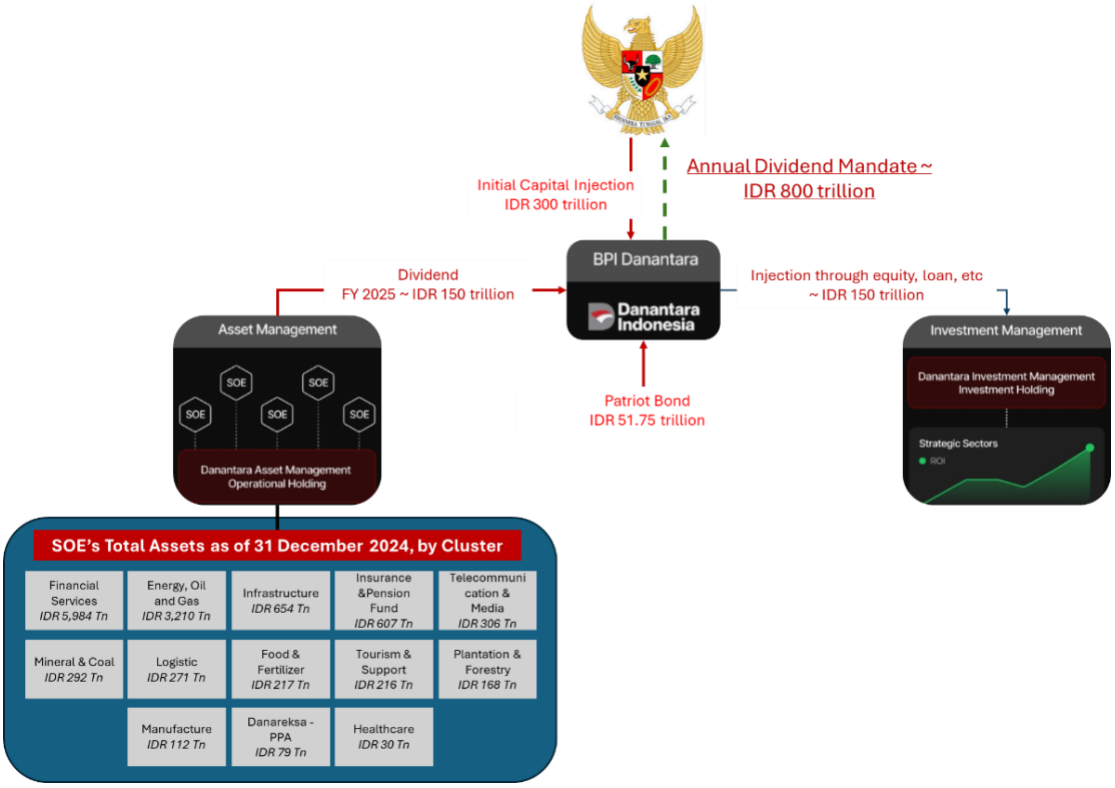
[20] International Monetary Fund. Investment Objectives of Sovereign Wealth Funds—A Shifting Paradigm. January 2011.
[21] Danantara Indonesia. Danantara Indonesia Diaries – Sovereign Funds. 4 November 2025.
[22] MetroTV News. Dana Awal Danantara Rp300 Triliun, Presiden Prabowo: Dapat dari Inefisiensi Anggaran hingga Korupsi. 24 February 2025.
[23] Jakarta Globe. Danantara Redefines How Indonesia Funds SOEs. 18 June 2025.
[24] Patriot bonds are a new bond fund introduced by Danantara to support national strategic programs, targeting Indonesian conglomerates and elite private capital. Unlike traditional government bonds, Danantara's patriot bond offers a formalized mechanism with an interest rate of just 2% per annum for five- and seven-year tenors. This rate is significantly lower than Bank Indonesia's benchmark interest rate (around 5.8%) and the government bond rate (around 6.1%). Fulcrum. Indonesia's Tycoons Pressed into National Service, Once Again. 5 December 2025.

At an operational level, Danantara oversees two key holdings: Danantara Asset Management (DAM) and Danantara Investment Management (DIM), which reflects mandate separation to mitigate risk between its roles.

DAM is structured as a superholding for SOEs under Danantara, with a focus on reorganizing and consolidating SOEs, streamlining portfolios through liquidations, mergers, and divestments, and fostering growth in strategic industries. Danantara plans to merge 1,068 SOEs, currently managed by around 50 holding firms, into 221 entities within the next three to four years.[25]

Meanwhile, DIM strengthens global partnerships and strategic investment. In its first year, it secured 11 international Memorandums of Understanding (MoUs) worth about IDR346 trillion and expanded national financing capacity by IDR150 trillion through loans, equity, patriot bonds, and global revolving credit facilities.[26] Landmark projects in the first year included investments in waste-to-energy, blood plasma, and the Kampung Haji projects.[27]

Figure 3: Structure of Danantara



Source: Danantara Indonesia.

[25] ANTARA. Indonesia's SWF Danantara targets increasing assets via value creation. 21 January 2026.
[26] Danatara Indonesia. Satu Tahun Danantara Indonesia: Memperkuat Fondasi Transformasi Ekonomi Nasional. 11 March 2026.
[27] The waste-to-energy project is explained in a later section of this report. Blood Plasma is a project in collaboration with SK Group to produce plasma-derived medicinal products. Kampung Haji provides accommodations, services, and retail services for Indonesians in Mecca. Danatara Indonesia. Danantara Investment Management Year End Letter. 2025.

A year after Danantara's launch, President Prabowo set an annual dividend target of approximately IDR800 trillion for the state budget[28] and a minimum return at 5%[29] — equivalent to USD45 billion annually on the fund's total current assets of USD900 billion.

To meet the government's ambitious directive, Danantara should pursue two complementary strategies through its key holdings:

- **DAM:** Optimize SOEs' performance to deliver stronger dividends.
- **DIM:** Reinvest available capital from SOE dividends and other financing proceeds into projects that can generate returns exceeding the minimum 5% rate, starting with the IDR150 trillion capital injection from the government, dividends, and patriot bonds.

The challenge for Danantara's dividend mandate

Historically, the actual dividend contribution from SOEs has fallen far short of the IDR800 trillion target. In fiscal year (FY) 2022, SOEs generated net profits of IDR309 trillion (a 3.15% return on assets [ROA]) from consolidated assets of IDR9,789 trillion, with dividends totaling around IDR78 trillion. As the largest shareholder, the Government of Indonesia (GOI) received IDR40 trillion of the total. In 2024, dividends increased to IDR145 trillion, and the GOI received IDR85 trillion.

Figure 4: Indonesia's SOE portfolio total assets and dividend contributions

Source: SOEs Portfolio Combined Financial Statement, IEEFA.

In 2025, Danantara received approximately IDR150 trillion (USD9.2 billion) in dividends, which was previously directed to the state budget. IDR143 trillion (USD9.1 billion) of this total was from seven SOEs, often referred to as the "Magnificent 7". An analysis of these SOEs indicates that historical dividend performance has never achieved the IDR800 trillion target (Table 2).

[28] Kompas. A Year into Danantara, President Prabowo Targets Annual Asset Returns of IDR 800 Trillion. 11 March 2026.
[29] MSN. Dari dividen hingga investasi, mampukah Danantara capai target Rp 800 T Prabowo? 17 March 2026.

Table 2: Dividends from the seven leading SOEs (IDR billion)

Leading seven SOEs	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*
Pertamina	8,374	4,029	2,929	14,025	9,360
PLN	17	400	750	2,188	3,090
Telkom	15,262	16,643	14,856	16,603	17,683
MIND ID	1,205	409	4,260	12,761	13,876
Mandiri	11,257	10,272	16,817	24,702	33,036
BNI	3,846	820	2,725	7,325	10,455
BRI	20,624	12,126	26,407	41,606	55,896
Total Dividends	**60,585**	**44,699**	**68,744**	**119,210**	**143,396**
Return on Assets (ROA)	**1.1%**	**2.0%**	**2.7%**	**3.1%**	**2.9%**

Source: Company reports, IEEFA.

Table 2 shows that the seven leading SOEs have the capacity to pay dividends. However, a substantial portion of this capacity, particularly for state-owned oil and natural gas corporation Pertamina and national electricity utility PT Perusahaan Listrik Negara (PLN), is supported by significant government subsidies. State subsidies and compensation to Pertamina and PLN have increased significantly from IDR116 trillion (USD7.9 billion) in 2020 to IDR374 trillion (USD23.6 billion) in 2024, a more than threefold jump.

The top seven SOEs generated IDR143 trillion in dividends in 2024 — less than 50% of the subsidies and compensation Pertamina and PLN received. Effectively, all of the dividends were funded through the government's budget. Given Danantara's objective of increasing non-tax state revenue, reliance on subsidies undermines the sustainability and quality of these dividend contributions. Ideally, SOEs should be able to operate and generate profits independently, without government fiscal support. The commercial viability of Pertamina and PLN would be considerably weaker without these subsidies.

Table 3: Dividend contributions and fiscal support for the top seven SOEs (IDR Billion)

	FY2020	*FY2021*	*FY2022*	*FY2023*	*FY2024*
Dividends					
Pertamina	8,374	4,029	2,929	14,025	9,360
PLN	17	400	750	2,188	3,090
Telkom	15,262	16,643	14,856	16,603	17,683
MIND ID	1,205	409	4,260	12,761	13,876
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BRI	20,624	12,126	26,407	41,606	55,896
Total Dividends	**60,585**	**44,699**	**68,744**	**119,210**	**143,396**
Subsidies & Compensation					
Pertamina	50,001	124,728	329,372	195,000	196,663
PLN	65,893	73,189	122,482	142,629	177,229
Total	**115,894**	**197,917**	**451,859**	**337,629**	**373,892**

Source: Company reports, IEEFA.

According to analysis by the Institute for Energy Economics and Financial Analysis (IEEFA), without government financial support, both Pertamina and PLN would have recorded a negative net income. As shown in Table 4, net profit across the top seven SOEs declines significantly when subsidy components are excluded, undermining their ability to provide dividends to holding companies. This highlights the extent to which current profitability and dividend capacity are dependent on government support.

Table 4: Top seven SOEs' net income without fiscal support (IDR billion)

Top seven SOEs	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*
Total Net Income (with subsidies and compensation)					
Pertamina	35,784	10,688	33,693	60,738	66,497
PLN	5,951	13,129	14,334	22,026	17,705
Telkom	20,804	24,877	20,736	24,560	23,649
MIND ID	1,820	14,325	22,495	27,523	40,200
Mandiri	21,786	28,320	45,347	58,835	61,147
BNI	4,193	11,722	14,656	21,780	22,389
BRI	21,758	27,557	48,569	61,054	61,871
Total Net Income (No subsidies or compensation)					
Pertamina	(17,078)	(67,568)	(225,451)	(82,618)	(110,883)
PLN	(53,601)	(49,968)	(100,940)	(110,249)	(148,959)
Telkom	20,804	24,877	20,736	24,560	23,649
MIND ID	1,820	14,325	22,495	27,523	40,200
Mandiri	21,786	28,320	45,347	58,835	61,147
BNI	4,193	11,722	14,656	21,780	22,389
BRI	21,758	27,557	48,569	61,054	61,871
Total Net Income	**(318)**	**(10,734)**	**(174,588)**	**885**	**(50,586)**

Source: IEEFA analysis.

If subsidies were removed, both Pertamina and PLN would record cumulative losses rather than profits, and would be unable to distribute dividends to shareholders (Table 5).

Table 5: Top seven SOEs' dividends without fiscal support (IDR billion)

Leading seven SOEs	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*
Pertamina*	18	0	0	0	0
PLN*	0	0	0	0	0
Telkom	15,262	16,643	14,856	16,603	17,683
MIND ID	1,205	409	4,260	12,761	13,876
Mandiri	11,257	10,272	16,817	24,702	33,036
BNI	3,846	820	2,725	7,325	10,455
BRI	20,624	12,126	26,407	41,606	55,896
Total Dividend Netted of Subsidy	**52,212**	**40,270**	**65,065**	**102,997**	**130,946**

Source: IEEFA analysis.
*Note: *Assuming that there was no dividend provided if the company suffers a loss.*

This dynamic raises concerns about the feasibility of achieving Danantara's IDR800 trillion dividend target. The current revenue base is effectively supported by large-scale subsidies, suggesting that meeting that target would require either increased fiscal support or a significant improvement in SOE profitability. Addressing this structural dependence is essential to achieve the dividend goal.

Energy sector reforms for sustainable dividends

The energy sector is central to Indonesia's financial administration and Danantara's long-term revenue prospects. Based on the previous analysis, SOEs in this sector are experiencing accumulated net losses rather than generating sustainable profits. Consequently, they are unable to pay dividends and instead rely on continued government fiscal support. This dependence not only undermines their commercial viability but also weakens Danantara's ability to deliver its goal of strengthening fiscal resilience through sustainable non-tax revenue.

As two critical energy sector SOEs that carry public service obligations (PSOs) from the government, Pertamina and PLN are in a challenging position. Pertamina needs to ensure national primary energy supply security, while PLN is required to provide affordable and reliable electricity access to consumers and industries across the country. These obligations are socially and politically crucial. However, these companies often show constrained commercial performance as they are required to deliver services at regulated or capped prices.

The SOEs also need to generate significant revenue to pay dividends to the government and secure sufficient retained earnings to invest in new infrastructure to support a growing economy and population. The government fills the revenue gap by providing subsidies and compensation to the SOEs, thereby maintaining affordable tariffs for consumers.

Consequently, dividend contributions from Pertamina and PLN are not determined solely by market dynamics but are guided by government intervention. This subsidy dependence limits SOEs' ability to deliver stable and predictable dividends, undermining Danantara's capacity to strengthen fiscal resilience and build sustainable non-tax revenue streams.

A critical question arises: how can Pertamina and PLN reduce their operational costs and reduce the subsidies and compensation burden on the government? Without reforms that reduce subsidy dependence and improve operational efficiency, Pertamina and PLN are likely to remain fiscal liabilities rather than reliable contributors to Danantara's portfolio.

Assessment of Pertamina's financial performance

Pertamina plays a dual role: safeguarding the national energy supply and serving as a commercial entity expected to generate profits. However, its financial performance is significantly impacted by several factors:

- Regulated fuel prices: Domestic fuel prices are regulated and capped below international market levels, eroding margins and preventing the company from capturing the full value of its products.
- Import dependence: Pertamina remains heavily dependent on imported crude oil, refined products, and liquefied petroleum gas (LPG), leaving it exposed to fluctuations in the US dollar and global oil price volatility.
- Operational inefficiencies: Limited refining capacity and high distribution costs further reduce competitiveness and impact profitability.
- Subsidy dependence: Government subsidies and compensation mask the company's underlying limitations, creating an appearance of profitability that does not reflect its true commercial position.

Based on Pertamina's profit and loss statement, it is evident that the Cost of Goods Sold (COGS) constitutes the largest share of the company's operating expenses. In 2024, the company's COGS was IDR844 billion, accounting for approximately 70% of revenue.

Table 6: Pertamina's profit and loss statement, 2020–2024 (IDR trillion)

	2020	2021	2022	2023	2024	Exp. To Revenue
Revenue	604.7	822.8	1,260.6	1,154.8	1,194.3	100%
Operating Expenses						
Cost of Goods Sold	(398.8)	(587.6)	(905.5)	(786.9)	(843.6)	70%
Expenses in Relation to Other Ops. Act.	(29.2)	(40.3)	(52.7)	(68.7)	(74.5)	5%
Upstream Production and Lifting Costs	(72.6)	(77.8)	(97.8)	(105.7)	(109.1)	9%
Sales and Marketing Expenses	(20.4)	(12.9)	(17.6)	(19.2)	(18.9)	2%
Other Expenses	(38.8)	(44.1)	(66.9)	(62.9)	(59.8)	5%
Total Operating Expenses	**(559.8)**	**(762.6)**	**(1,140.6)**	**(1,043.4)**	**(1,105.9)**	**92%**

Source: Pertamina's Audited Financial Reports.

A more detailed breakdown of COGS indicates that direct materials, primarily crude oil and petroleum feedstock, account for 46.2% of total expenses (Table 7). Additionally, import-related segments, including premium gasoline imports (20.7%), other oil product imports (13.1%), and domestic purchases (12.1%), collectively form a substantial portion of total costs.

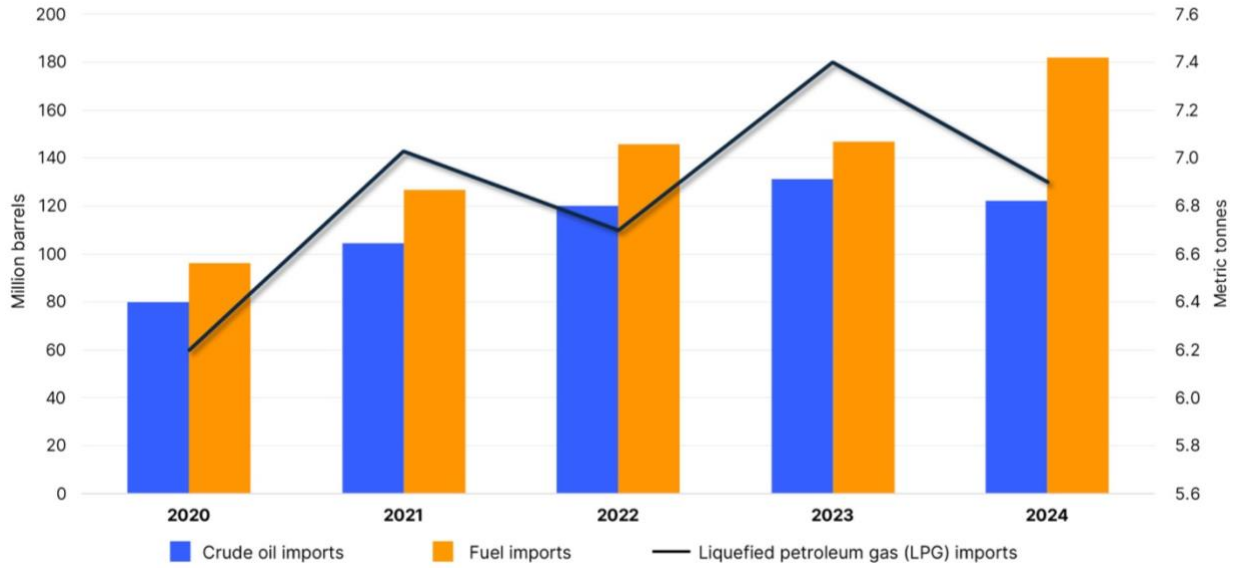
Table 7: Pertamina's COGS structure, 2020–2024 (IDR trillion)

COGS Proportion	2020	2021	2022	2023	2024	Proportion
Production Cost						
Direct materials	167.7	306.7	438.4	360.8	354.4	46.2%
Utilities, infrastructure, and fuel	0.4	16.9	23,1	22.1	22.9	2.4%
Depreciation	14.8	9.8	8.0	10.1	9.4	1.5%
Salaries, wages, and employee benefits	4.1	3.2	2.9	3.2	4.6	0.5%
Customs and duty	2.0	2.8	3.8	3.0	3.4	0.4%
Materials and equipment	10.1	0.7	2.0	1.8	2.2	0.5%
Freight and transportation	2.2	2.0	2.1	3.7	2.0	0.3%
Professional services	2.2	1.2	1.2	1.4	1.5	0.2%
Rent	4.9	0.2	0.2	0.1	1.1	0.2%
Maintenance and repairs	1.6	0.6	0.6	0.7	0.7	0.1%
Business travel	0.2	0.1	0.2	0.2	0.2	0.0%
Others	1.9	1.0	0.6	0.8	0.8	0.1%
Oil Purchase and the Others						
Imports of premium gasoline	40.3	96.8	223.4	182.9	186.6	20.7%
Domestic purchases of other oil products	44.0	68.5	108.6	102.1	104.3	12.1%
Imports of other oil products	90.7	103.2	85.4	80.5	100.4	13.1%
Others	11.7	(26.2)	5.0	13.5	49.2	1.5%
Total COGS	**398.8**	**587.6**	**905.5**	**786.9**	**843.6**	**100.0%**

Source: Pertamina.

This cost structure highlights Pertamina's heavy reliance on imported oil and refined products. Indonesia's dependence on imported fuels started in 2003, after domestic demand exceeded local production[30], and is compounded by the limited oil processing capacity of national refineries, insufficient energy infrastructure, and delays in energy diversification.[31] As shown in Figure 5, even though Pertamina has reduced crude oil and LPG imports, its overall fuel imports have increased significantly from 146.7 million barrels in 2023 to 182.1 million barrels in 2024. As a result, Pertamina remains highly exposed to significant risks from price volatility and supply chain disruptions.

Figure 5: Pertamina's imported oil trend



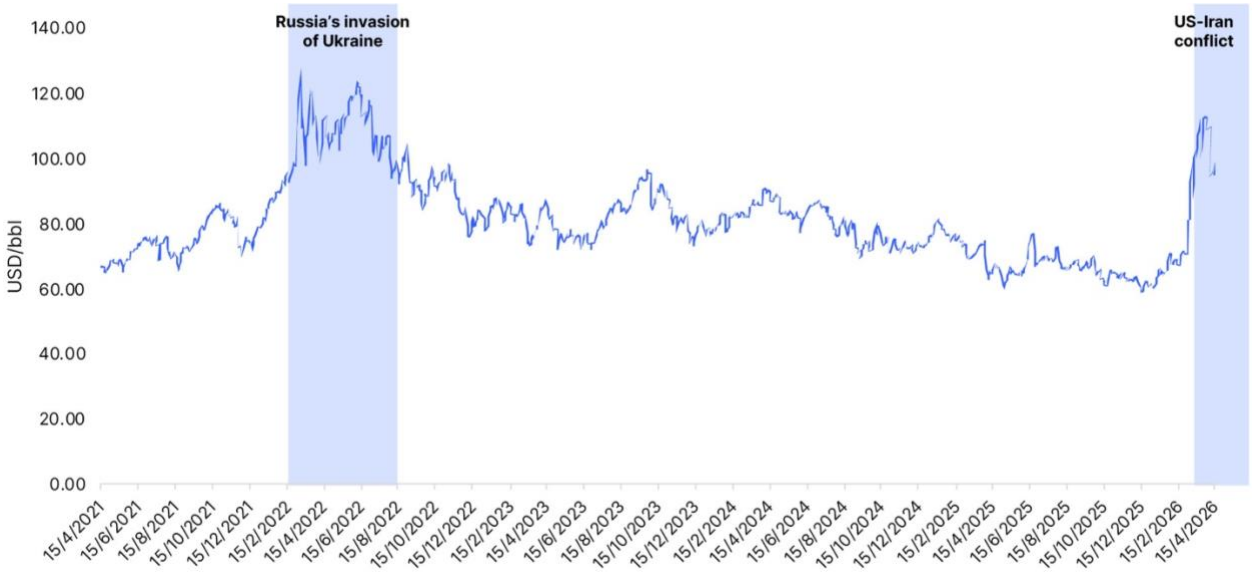
Source: Pertamina.

The SOE's oil import costs have varied significantly each year, reflecting its vulnerability to global price volatility. External factors, including geopolitical tensions, climate-related disruptions, logistical bottlenecks, and OPEC+ (the Organization of the Petroleum Exporting Countries [OPEC] and other oil-producing countries) production decisions, further exacerbate these risks. Consequently, Pertamina's COGS have fluctuated sharply (Table 7). In 2022, COGS reached its peak, reflecting heightened vulnerability to international price volatility amid surging oil and gas prices. Rising tensions between Russia and Ukraine in late 2021 had already pushed prices upward. Russia's full-scale invasion in February 2022 resulted in further increases. By 7 March 2022, Brent crude spiked to USD 127 per barrel.[32]

[30] IEEFA. 'Golden age' or energy dependence? Evaluating the Indonesia-US trade deal amid Middle East turmoil. 11 March 2026.
[31] Tempo. 7 Reasons Why Indonesia Still Reliant on Oil Imports. 14 January 2025.
[32] IEEFA. Taking stock of the oil and gas sector as the transition to sustainable finance proceeds apace. 1 August 2023.

More recently, the Middle East conflict triggered another price hike. On 7 April 2026, the price of dated Brent crude (the cost of oil physically delivered to customers) reached a high of USD144.42 per barrel.[33]

Figure 6: Brent crude oil futures



Source: S&P Global.

This price volatility emphasizes the risks of maintaining high levels of fuel imports. Continued reliance on imported oil and gas is likely to increase Pertamina's exposure to external shocks and amplify the impact of global energy price fluctuations on its financial performance.

Assessment of PLN's financial performance

PLN's cost structure reveals a similarly high dependence on energy inputs. As shown in Table 8, fuel and lubricants account for approximately 33% of the national utility's total operating expenses, with costs linked to global market prices and denominated in US dollars. This exposes PLN to international energy market fluctuations, exchange rate volatility, and domestic price controls, leaving its financial performance highly sensitive to external and internal factors.

[33] Bloomberg. Brent Oil Hits Record $144 a Barrel in Key Physical Market. 7 April 2026.

Table 8: PLN's profit and loss, 2020–2024 (IDR trillion)

	FY2020	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*Exp. To Revenue*
Total Revenue	345.4	367.0	441.1	487.4	545.4	100%
Total Operating Expenses						
Personnel	(25.0)	(25.1)	(24.9)	(32.4)	(30.7)	6%
Leases	(5.5)	(4.8)	(2.8)	(1.9)	(2.6)	1%
Purchased Electricity	(96.3)	(103.6)	(130.2)	(154.8)	(178.6)	30%
Fuel and Lubricants	(106.0)	(118.4)	(151.4)	(164.7)	(179.3)	33%
Maintenance Expenses	(21.9)	(22.6)	(23.9)	(29.5)	(31.5)	6%
Operating Expenses Other	(7.2)	(7.2)	(8.9)	(9.6)	(11.5)	2%
PP&E Depreciation	(39.1)	(41.4)	(44.1)	(47.3)	(50.5)	10%
Finance Costs	(27.4)	(20.4)	(17.1)	(21.0)	(24.4)	5%
Total Operating Expenses	**(328.4)**	**(343.5)**	**(403.3)**	**(461.2)**	**(509.2)**	**94%**

Source: PLN's Audited Financial Report.

A further breakdown of fuel and lubricant expenses shows that non-oil fuels dominate the cost structure (77.2%), followed by fuel oils (22.6%). Within non-oil fuels, coal represents the largest component, accounting for approximately 43% of total fuel costs, followed by natural gas at 31%. This aligns with PLN's generation mix, where coal-fired power plants (CFPPs) account for approximately 66.52% of total electricity production.[34]

Table 9: PLN's fuel and lubricants cost, 2020–2024 (IDR trillion)

Fuel and Lubricants Proportion	*2020*	*2021*	*2022*	*2023*	*2024*	*Proportion*
Fuel Oils	15.8	24.2	39.3	39.2	44.4	22.6%
Non-Oil Fuels	90.1	94.0	111.8	125.1	134.5	77.2%
• **Coal**	*46.2*	*53.0*	*63.1*	*69.5*	*77.4*	42.9%
• **Natural Gas**	*40.0*	*37.1*	*43.9*	*50.5*	*51.3*	31.0%
• **Others**	*3.9*	*3.9*	*4.8*	*5.1*	*5.8*	3.3%
Lubricants	0.1	0.2	0.3	0.4	0.4	0.2%
Total	**106.0**	**118.4**	**151.4**	**164.7**	**179.3**	**100%**

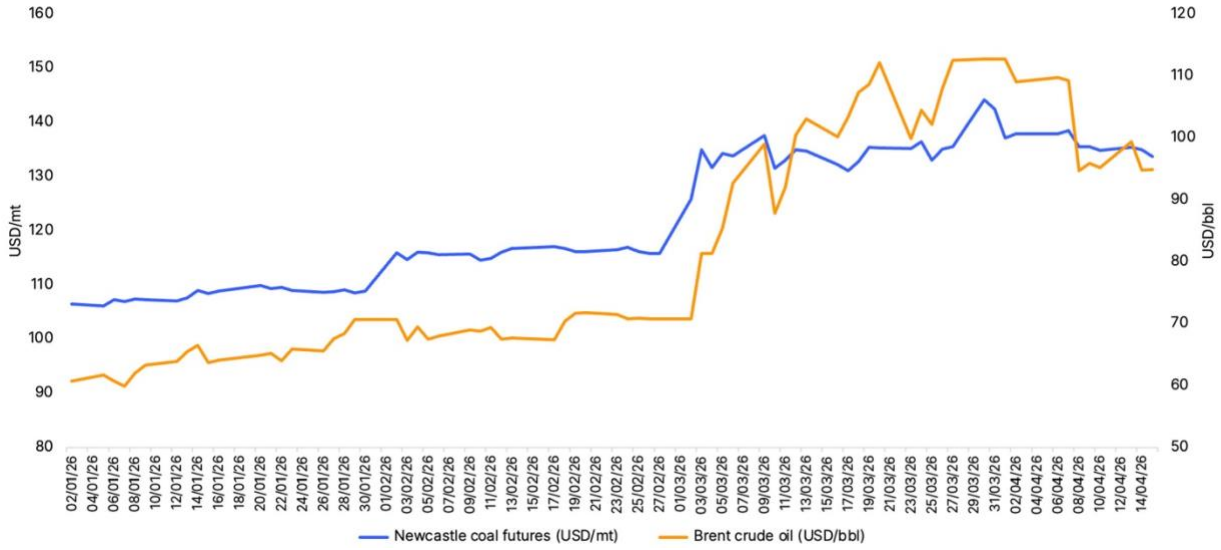
Source: PLN's Audited Financial Report.

The dominance of coal, oil, and gas in PLN's cost structure underscores its high dependence on conventional energy sources, exposing it to significant price volatility. As oil prices rise amid supply disruptions because of the recent Middle East conflict, demand may shift toward alternative fuels such as coal, which, in countries with existing coal plants, could be deployed with minimal infrastructure adjustments. However, this fuel substitution has contributed to a sharp increase in coal

[34] CNBC Indonesia. Pembangkit Batu Bara Masih Jadi 'Raja' di RI, Ini Buktinya. 14 November 2025.

prices. For instance, the Newcastle coal price rose from USD115.8 per tonne on 27 February 2026 to USD144 per tonne on 29 March 2026. The price has ranged between USD133 and USD137 per tonne in the first half of April 2026.

Figure 7: Coal versus crude oil price



Source: SP Global, Investing.com.

Similar to Pertamina, PLN's dependence on fossil fuels creates structural challenges:

- Exposure to global price volatility: PLN's dependence on coal, oil, and gas exposes it to fluctuations in international commodity prices, which directly impact its costs.
- Regulated tariff structure: Electricity tariffs are capped to ensure affordability, preventing PLN from passing increasing costs on to consumers. This erodes margins and forces the government to provide support through subsidies and compensation payments. Additionally, Domestic Price Obligation (DPO) and Domestic Market Obligation (DMO) policies require producers to sell a minimum percentage of coal at a capped price[35], limiting the government's ability to benefit from higher revenues.
- High maintenance costs of coal plants: As the owner of a large fleet of coal plants, PLN faces high maintenance expenses. Although coal has traditionally been seen as cost-effective, its generation cost has surged from IDR637 per kilowatt-hour (kWh) in 2020 to IDR941/kWh in 2024 — a 48% increase. This rise was driven by obsolete infrastructure and higher operational, maintenance, and compliance expenses.[36]

[35] IEEFA. Transforming Indonesia's coal dependence into clean energy opportunities. November 2025.
[36] IEEFA. Transforming Indonesia's coal dependence into clean energy opportunities. November 2025.

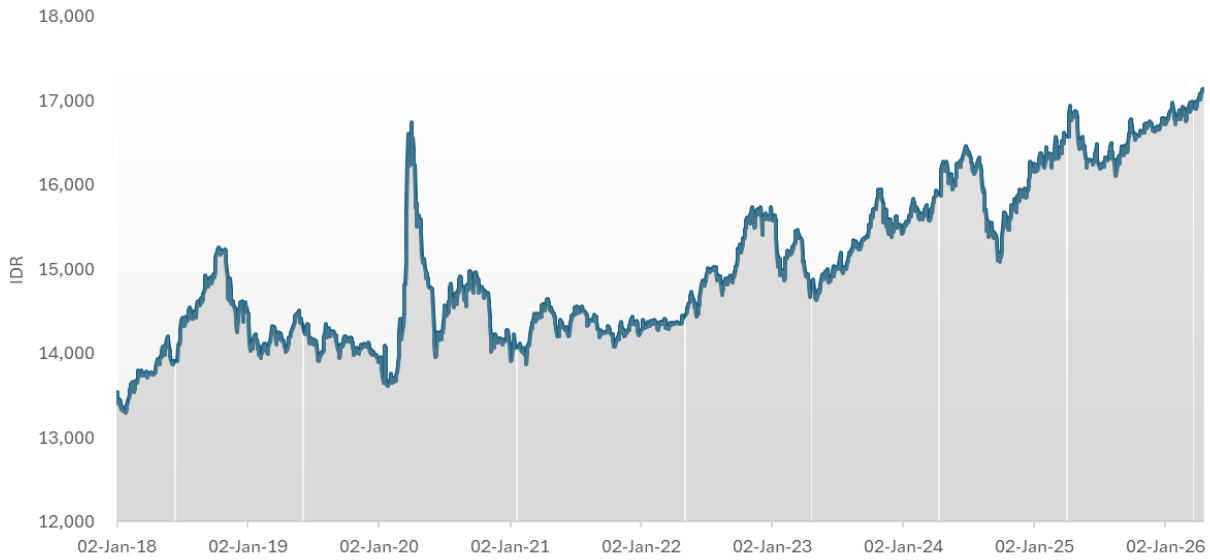
As a result, PLN's profitability is highly dependent on state financial support rather than on operational efficiency. Without government assistance, the utility's net income would be negative, thereby affecting its capacity to pay dividends to Danantara. This reliance on the state budget not only amplifies structural cost pressures but also necessitates continued subsidies to ensure electricity remains affordable.

These financial challenges highlight the urgency of identifying ways to improve operational efficiency. Restructuring PLN's generation portfolio would reduce dependence on volatile fossil fuel markets and accelerate investment in low marginal operating cost renewable energy, such as solar, wind, and geothermal. In parallel, modernizing transmission infrastructure is essential to integrate clean energy at scale, overcome geographic supply-demand disparities, and reduce reliance on costly purchased electricity.

Transitioning to renewable energy for fiscal sustainability

Pertamina and PLN are also exposed to exchange rate risks associated with the US dollar. Coal, oil, and gas costs are dollar-denominated, leaving energy sector SOEs exposed to currency fluctuations. Since 2018, the local currency has depreciated significantly against the US dollar, falling by 26% from IDR13,542 on 1 January 2018 to IDR17,141 on 16 April 2026. In contrast, renewables are domestically available, have no fuel costs, and are not linked to US dollar volatility, offering a pathway to improved financial stability.

Figure 8: US Dollar – Indonesian Rupiah exchange rate



Source: Bank Indonesia.

For Danantara to meet its goal of stabilizing Indonesia's fiscal position and to achieve energy security, it should encourage SOEs to reduce their reliance on government subsidies and transition toward independent profitability. A strategic shift towards clean energy would be a decisive step.

Global peers offer useful insights into managing the transition to renewables. Leading funds such as Saudi Arabia's PIF, Abu Dhabi's Mubadala Investment Company (Mubadala), and Qatar's Investment Authority (QIA) have responded by accelerating diversification into renewables and their supporting infrastructure, despite benefiting from rising oil prices.[37] They have also maintained buffers to absorb shocks and positioned themselves as global leaders in clean energy finance. Beyond generation, SWFs worldwide are also investing heavily in transmission infrastructure, recognizing its critical role in enabling the integration of renewable energy.

Unlike Gulf economies that benefit from rising oil prices, Indonesia is a net oil importer, exposing it to price shocks. Although the country is a major coal exporter, the sector's heavy reliance on diesel for mining operations offsets much of the benefit from higher coal prices, as rising oil costs erode margins. From a generation viewpoint, electricity production remains dominated by CFPPs. While coal prices for domestic use are capped under the DPO scheme, this mechanism creates a distortion: it shields consumers but constrains the government's profitability, further reducing its capacity to contribute dividends to Danantara.

For Danantara, particularly its SOE manager DAM, diversifying into clean energy could enhance resilience to external shocks. Structural reforms at Pertamina and PLN are needed to withstand pressures such as disruptions to oil supplies and rising global energy insecurity following the Iran conflict. These factors have limited the SOEs' dividend contributions to the government, weakening Danantara's revenue base at a critical time. Phasing out the DPO and DMO policies, revising energy subsidies, and introducing measures to attract clean energy investment would accelerate the energy transition and improve Danantara's long-term profitability.

Investment trends and experiences from global SWFs

Beyond SOE reform, a critical question for Danantara, particularly its investment holding arm DIM, is how to allocate capital to deliver sustainable and high returns. Experience from 2022, amid geopolitical and economic instability, reveals two notable investment trends: a resurgence in real estate and continued strong growth in the technology sector.[38]

Despite rising interest rates, real estate attracted significant capital, supported by inflation-linked leases that provided a hedge against volatility. Between January 2022 and March 2023, SWFs invested USD21.3 billion in real estate, nearly triple the volume recorded between October 2020 and December 2021.[39]

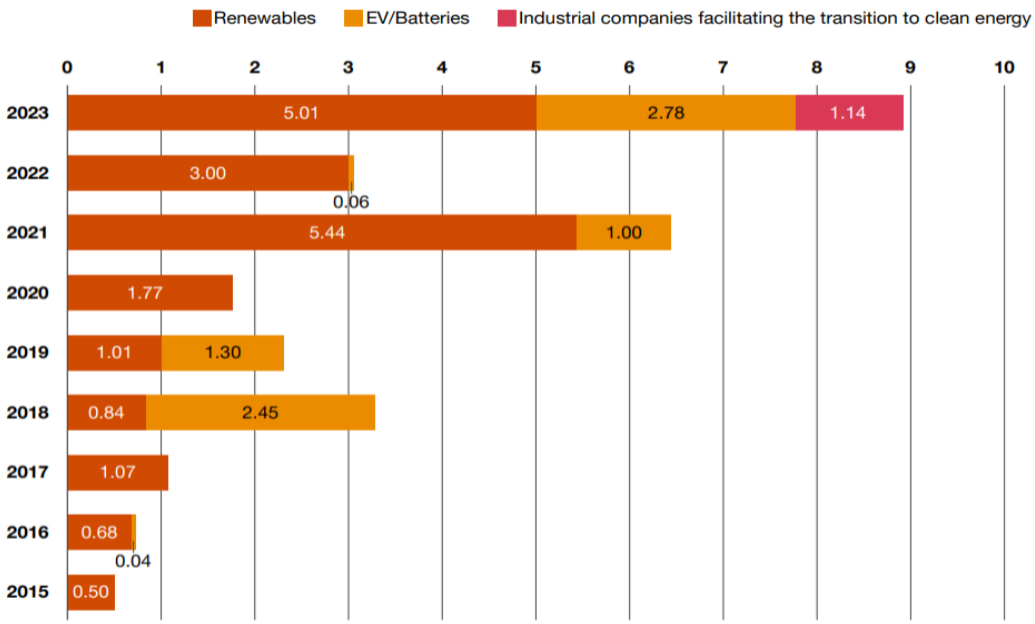
Technology, particularly innovative and green categories, also attracted SWF capital. These assets offered strong fundamentals, resilience, and potential to decouple returns from global shocks.

[37] M&A Worldwide. From Oil to Opportunity: Middle Eastern Sovereign Funds Driving Strategic Global Investments.
[38] IFSWF. Sovereign Wealth Funds: Investing in Transition. 2023.
[39] IFSWF. Sovereign Wealth Funds: Investing in Transition. 2023.

Clean energy has become a defining investment frontier. Since surpassing fossil fuels in 2019, global investment in renewables grew by 11% in 2024, reaching USD2.1 trillion — double that of fossil fuel investment. Renewables accounted for more than 92% of global power capacity expansion in 2024, driven primarily by solar and wind.[40]

SWF investments are extending beyond generation assets, such as solar and wind, to include networks and grids, energy storage, and green technology supply chains. Portfolios are also diversifying into electric vehicles (EVs), sustainable agriculture, recycling, and other transition-related sectors, reflecting a holistic approach to sustainability.[41]

Figure 9: SWFs direct investments in climate opportunities (USD billion)



Note: Starting in 2023, the 'industrial companies facilitating the transition to clean energy' sub-sector was added, which includes any company within the industrial sector that facilitates the transition to cleaner energy (e.g., companies involved in producing or operating heat pumps, carbon capture technology, etc.).
Source: Data retrieved from IFSWF

Source: PwC. Rethinking the role of long-term investors in the energy transition. December 2024.

SWFs are increasingly reducing exposure to conventional oil-linked industries and redirecting capital toward green technologies. Between January 2022 and March 2023, all SWF energy investments were in renewables, with no allocations to oil and gas.[42] This shift aligns with global decarbonization goals and improves access to green financing instruments. Funds prioritizing clean energy are better positioned to issue green bonds, which typically benefit from stronger investor demand and lower financing costs, reinforcing their role in advancing the energy transition.

[40] BloombergNEF. Global Investment in the Energy Transition Exceeded $2 Trillion for the First Time in 2024, According to BloombergNEF Report. 30 January 2026.
[41] IFSWF. Sovereign Wealth Funds: Investing in Transition. 2023.
[42] IFSWF. Sovereign Wealth Funds: Investing in Transition. 2023.

A recent World Economic Forum study[43] found that companies generating green revenues tend to grow faster, incur lower capital costs, and achieve higher valuations. Similarly, the London Stock Exchange Group (LSEG) examined over 6,500 publicly listed global companies and found that green revenues grew by 12% annually between 2020 and 2024 — twice the rate of conventional business lines. Growth was strongest among companies where green products accounted for a significant share of revenue, with over half achieving compound annual growth rates (CAGRs) above 30% and deriving at least 10% of revenue from green products in 2024.

Recent investments by SWFs in clean energy projects

SWFs have demonstrated resilience by maintaining their commitment to Sustainable Development Goals (SDG)-aligned investments despite global disruptions, with Gulf funds leading this transition. Their strategies increasingly focus on large-scale overseas projects that advance energy transition, strengthen domestic sectors, and reinforce diplomatic ties.

Saudi Arabia's PIF has made substantial commitments to energy transition investments. ACWA Power, in which PIF holds a 44% stake, now delivers 52.3 gigawatts (GW) of renewable capacity across more than a dozen countries.[44] PIF's largest transition commitment supports 70% of the cost of the Saudi Green Initiative[45], which aims to increase the share of renewables in Saudi Arabia's power mix to 50% by 2030. With PIF funding, the initiative had financed 10.7GW of solar projects by 2025, achieving some of the lowest levelized costs of energy globally. An additional 10GW of tenders are slated for 2026.[46] PIF also became the first SWF to issue a green bond, including a USD3 billion inaugural offering to finance green investments.[47]

In 2025, Abu Dhabi's SWF, Mubadala, through its clean energy subsidiary, Masdar, committed USD10 billion to deliver 10GW of renewable capacity across Sub-Saharan Africa by 2030, positioning the United Arab Emirates (UAE) as a major external supporter of the region's energy transition.[48] Masdar is also active in Indonesia as a key investor in the 192 megawatt-peak (MWp) Cirata floating solar plant, the country's largest solar venture.[49] Cirata has become a benchmark project, providing lessons that could support subsequent floating solar development.

In addition to renewable generation, SWFs also invested in grid infrastructure and transmission assets to support the energy transition. The United Kingdom (UK) National Wealth Fund has announced a GBP800 million financial guarantee to support the delivery of four Scottish and Southern Electricity Networks (SSEN) Transmission grid upgrade projects, underway in the north of Scotland.[50] Other examples include Australia's Future Fund acquiring a 10% stake in Transgrid, the

[43] World Economic Forum. Already a MultiTrillion-Dollar Market: CEO Guide to Growth in the Green Economy. December 2025.
[44] ACWA Power. Investor Report For the twelve-month period ended 31 December 2025.
[45] PIF. Green Finance Framework. Accessed 20 April 2026.
[46] IEEFA. Realizing Indonesia's Ambitious Renewable Energy Goals Calls for a New Approach. 19 June 2025.
[47] PIF. PIF announces successful completion of USD 3 billion inaugural bond. 6 October 2022.
[48] IISS. Could Gulf and Southeast Asian sovereign wealth funds lead global green investment?. 1 October 2025.
[49] Masdar. President of Indonesia inaugurates Southeast Asia's largest floating solar plant. 9 November 2023.
[50] National Wealth Fund. National Wealth Fund backs major grid upgrade in the north of Scotland with £800m guarantee for SSEN Transmission. 19 December 2025.

largest electricity transmission operator in the country[51], and Masdar increasing its ownership in renewable energy company Terna Energy from 70% to 100%[52], as Terna commits to providing EUR23 billion to transform Italy's electricity infrastructure.[53]

Furthermore, there have been significant new investments in recent months, underscoring how SWFs are accelerating their role as global leaders in clean energy finance, including:

- Norges Bank Investment Management launched Northview Energy

In early 2026, Norges Bank Investment Management (which manages Norway's GPFG), in partnership with Brookfield and British Columbia Investment Management Corporation (BCI), established a renewable energy platform, Northview Energy, to acquire and operate a diversified portfolio of contracted, operational renewable energy assets across the US and Canada. Each party holds an equal ownership stake and collectively committed approximately USD2.6 billion in equity.[54] The initial portfolio comprises 22 newly operational, contracted utility-scale solar and onshore wind assets in US power markets experiencing strong electricity demand growth, representing a total installed capacity of approximately 2.3GW.[55]

- Masdar and Total Energies renewable energy joint venture

Masdar and Total Energies have signed an agreement on 2 April 2026 to establish a USD2.2 billion joint venture (JV), with each party holding a 50% ownership stake.[56] The JV will serve as the exclusive platform for both companies to develop, build, own, and operate onshore solar, wind, and battery storage projects across Azerbaijan, Indonesia, Japan, Kazakhstan, Malaysia, the Philippines, Singapore, South Korea, and Uzbekistan. The platform is expected to include approximately 3GW of operational assets and a further 6GW in advanced development, targeted for operation by 2030.

- Qatar Investment Authority Equity Top-up to ISAGEN

QIA has completed a USD535 million investment in ISAGEN, increasing its equity stake to 15%.[57] ISAGEN is the largest pure-play renewable energy platform and the third-largest power generator in Colombia, with an 18% market share of total annual generation and 25% of renewable output. The company operates a portfolio of 18 power plants with a total installed capacity of around 3.1GW, primarily hydroelectric assets that generate stable, contracted cash flows.

In Southeast Asia, Singapore stands out as an example of how SWFs have expanded green investment portfolios. Singapore's SWFs, GIC and Temasek Holdings, are focusing on diversification across

[51] Future Fund. Future Fund and OMERS complete transaction for 9.995% of Transgrid. 20 May 2025.
[52] Bisnis Indonesia. Masdar Akuisisi Perusahaan EBT Yunani Terna Energy. 10 April 2025.
[53] ESG News. Italy's Grid Operator Terna to Invest €23 Billion to Boost Renewable Capacity. 17 March 2025.
[54] Carbon Credits. Brookfield, NBIM, and BCI Launch a $2.6 Billion Clean Energy Platform. 10 March 2026.
[55] Brookfield. BCI, Norges Bank Investment Management and Brookfield Partner to Launch Northview Energy. 3 March 2026.
[56] TotalEnergies. TotalEnergies and Masdar to form $2.2 billion Joint Venture to Accelerate Renewable Energy Growth in Asia. 2 April 2026.
[57] Qatar Investment Authority. QIA closes increased investment in renewable power generator, ISAGEN. 10 December 2025.

geographies and sectors. The following section examines how Temasek is driving the energy transition across the region.

Temasek's strategic shift to accelerate energy transition

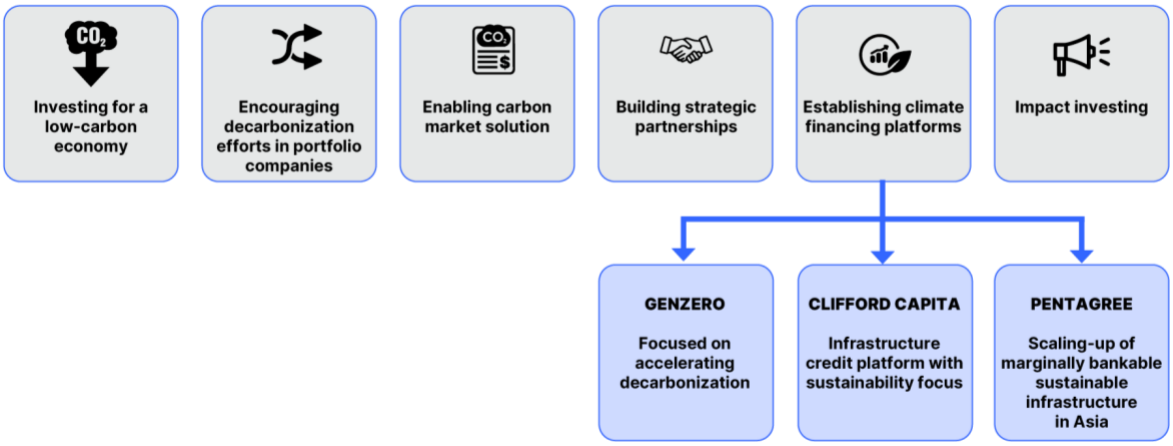
Temasek has a similar background to Danantara, with an initial portfolio comprising shares in SOEs previously owned by the Singapore Government. This structure was designed to separate business decisions from political considerations and establish a commercially driven SWF.

Despite lacking natural resource reserves, Singapore initially positioned itself as a financial and trading hub for oil and gas, supported by its strategic location and consistent and transparent policy frameworks. Temasek played a critical role in this development by investing in key strategic sectors. However, amid a global increase in climate action, rising debt levels, and challenging industry operating conditions (including those faced by Pavilion Energy[58]), Temasek started directing the bulk of its investments toward renewable energy technologies, including transmission infrastructure and battery storage, to diversify its business and reduce greenhouse gas (GHG) emissions across its portfolio.

Rising electricity costs[59] and the introduction of a carbon tax by the Singapore Government in 2019[60] have also supported this shift. Following the carbon tax announcement, Temasek introduced an internal carbon price in 2021 at USD42 per tonne of carbon dioxide equivalent (tCO_2e)[61], which has increased to USD65/tCO_2e as of 1 April 2024, applied across the company's investment portfolio.[62] This has strengthened alignment with GHG emission reduction mandates.

[58] Pavilion Energy illustrates the challenges of current operating conditions. Established by Temasek in 2013 as an integrated LNG and natural gas company, Pavilion sought to meet Asia's growing energy demand while supporting the energy transition. Its portfolio included 6.5 mtpa of long-term LNG contracts, regasification capacity in the UK, regasification access in Singapore and Spain, marine bunkering operations, and a fleet of LNG vessels. Due to high operating costs, which led to persistent losses (Pavilion recorded significant losses of USD566 million in 2020, USD428 million in 2021, and USD666 million in 2022, despite a profit of USD438 million in 2023), Temasek finally divested Pavilion Energy to Shell Eastern Trading Pte. Ltd.
[59] Currently, Singapore is dependent on imported natural gas, which generates about 95% of its electricity. Singapore's dependence on imported natural gas has driven both emissions and high tariffs. From April to June, Singapore's electricity tariff was SGD29.72 cents/kWh (~USDc23.4/kWh), compared to Malaysia's MYR38.52 sen/kWh (~USDc9.8/kWh) and Indonesia's IDR997–1700/kWh (~USDc6–10.3/kWh). This cost disparity, combined with the carbon tax, has accelerated the country's push toward renewables.
[60] National Climate Change Secretariat Singapore. Carbon Tax.
[61] Temasek. Temasek Review 2021 Media Conference. 13 July 2021.
[62] Temasek. Temasek Review 2024 - Sustainability.

Figure 10: Temasek's sustainable investment strategy



Source: Temasek, IEEFA.

Temasek embeds environmental, social, and governance (ESG) principles across its investment process. This includes expanding exposure to businesses with a positive impact, strengthening practices through due diligence and engagement, and excluding restricted industries. Moreover, its Climate Transition Readiness Framework assesses each portfolio company's preparedness for decarbonization. Together, these measures aim to align Temasek's portfolio with its strategy while supporting long-term value creation.

Temasek has also positioned itself as a catalyst in accelerating the energy transition, both in Singapore and globally. Its approach focuses on three strategic pillars:

1. **Accelerating renewable energy**

With limited land and renewable energy potential in Singapore, Temasek has expanded its investments abroad to capture clean energy opportunities. A flagship example is its collaboration with Brookfield to acquire Neoen, a developer and operator of solar, wind, and battery projects with 4,129MWp of solar, 2,429 megawatts (MW) of wind, and 5,302 megawatt-hours (MWh) of storage capacity across 15 countries. This acquisition has broadened Temasek's global renewable energy exposure and strengthened access to technical expertise and large-scale resources.

Temasek has also enhanced its financing capabilities in Southeast Asia through its portfolio company, Sembcorp Industries, which is dedicated to accelerating renewable energy development. A notable example is its involvement in Indonesia's new capital, Nusantara, where Sembcorp Industries developed a 50MW solar photovoltaic (PV) project.[63] This investment highlights the SWF's role in enabling regional energy transition projects beyond Singapore.

[63] Sembcorp. Sembcorp and PLN Nusantara Power Launches First Utility-Scale Integrated Solar and Energy Storage Project in Indonesia. 20 January 2025.

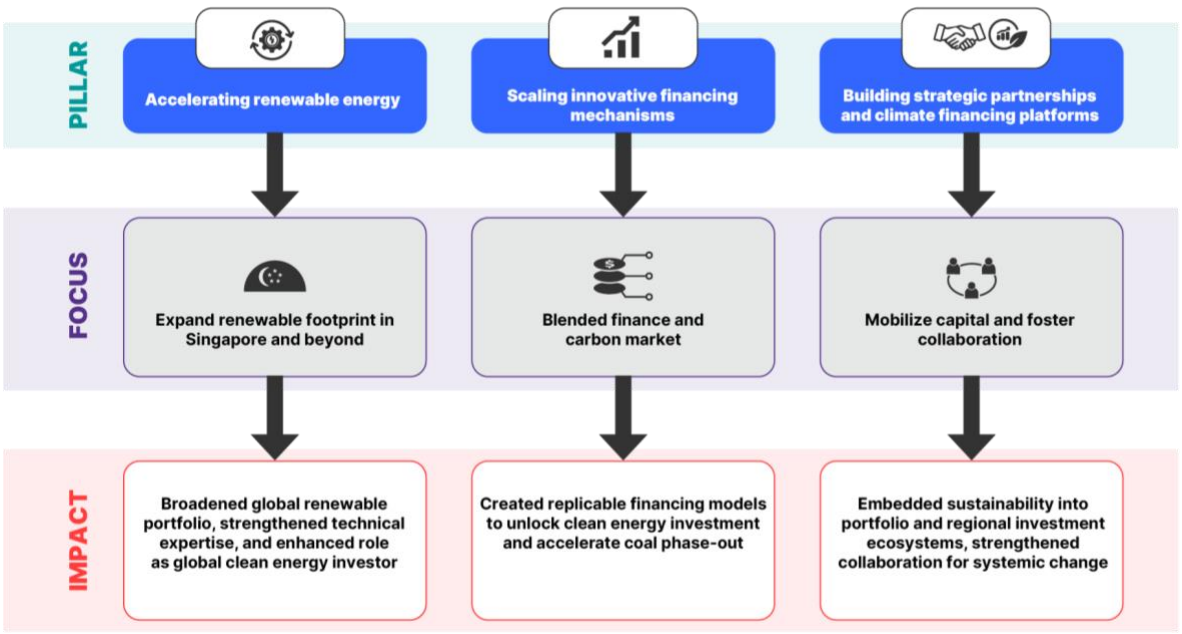
2. Scaling innovative financing

Temasek is pioneering blended finance and carbon market solutions. It joined the Transition Credits Coalition (TRACTION) to explore the use of transition credits to accelerate coal plant retirements. It aims to monetize the emissions avoided through early CFPP closures and their replacement with clean energy.[64] Current negotiations with ACEN's SLTEC CFPP retirement project in the Philippines could establish a precedent for financing models that enable rapid coal phase-out across Southeast Asia, including Indonesia.

3. Building strategic partnerships and establishing climate financing platforms

Recognizing that systemic change requires collaboration, Temasek has built strategic partnerships with climate-focused financing platforms that can mobilize capital across the investment cycle, from early-stage to mature projects, support marginally bankable projects, de-risk clean energy investments, and foster partnerships across governments, financial institutions, and private sector actors.

Figure 11: Strategic pillars driving Temasek's energy transition



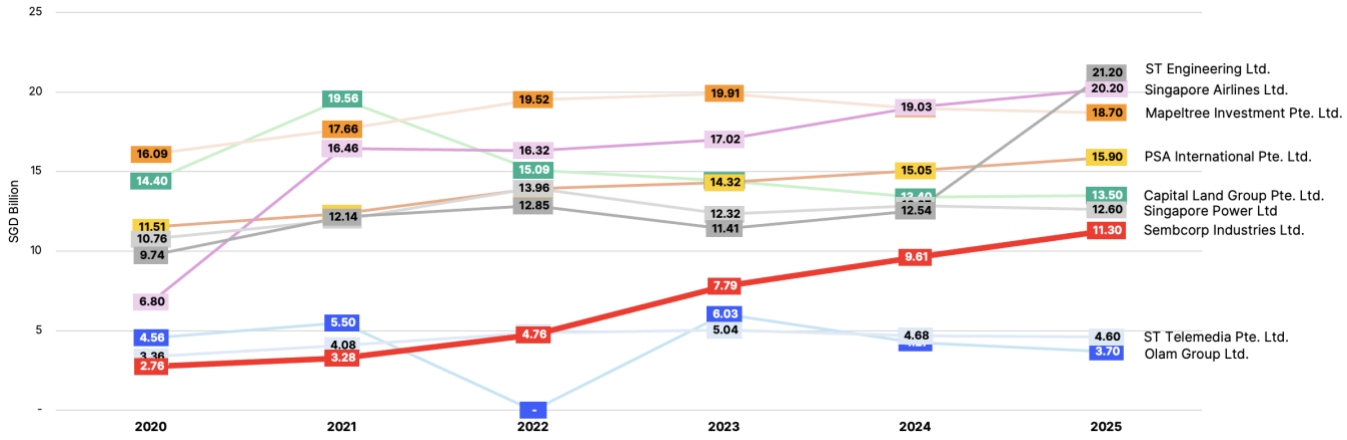
Source: IEEFA analysis.

Temasek's total portfolio amounts to USD365 billion, with nearly 10% (USD36 billion) allocated to sustainability-aligned investments. While still a relatively small share, the fund has achieved tangible progress in reducing GHG emissions, with emissions declining from 30 million tCO_2e in 2020 to 21 million tCO_2e in 2025.

[64] IEEFA. Transition credits: A potential financial enabler for the coal-to-clean switch. 15 April 2025.

Beyond its role in accelerating the energy transition, Sembcorp Industries' performance is noteworthy. Among Temasek's 12 major investments — each with at least a 50% stake and collectively accounting for SGD181 billion in market capitalization — Sembcorp Industries has been a clear outperformer. Based on IEEFA analysis, it has achieved a 26% CAGR in market capitalization, significantly outpacing its peers.

Figure 12: Temasek's major investment market capitalisation or shareholding equity



Source: IEEFA analysis.
Note: Singapore Telecommunication Ltd and Mandai Park Holding Pte. Ltd has been excluded.

Sembcorp Industries shift toward renewables

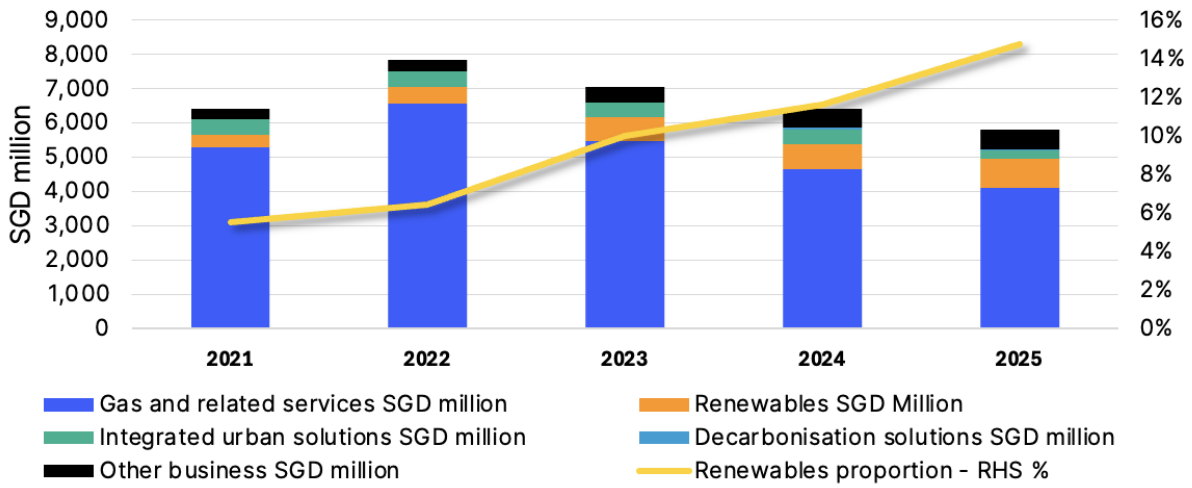
Initially, Temasek's energy-focused subsidiary, Sembcorp Industries, relied heavily on natural gas. In 2021, gas energy contributed 83% of its revenue. However, as the company expanded investments in clean energy, gas-related revenue dropped to 72% in 2024. Meanwhile, revenue contributions from renewable energy projects increased sharply from 6% in 2021 to 12% in 2024.

The increase in revenue from renewable energy investments highlights Sembcorp Industries' commitment to advancing the energy transition. As of February 2026, its renewable energy portfolio stood at 20.4GW (installed and under construction) of a total energy portfolio of 28.5GW across 11 countries.[65]

[65] Sembcorp. About Us.

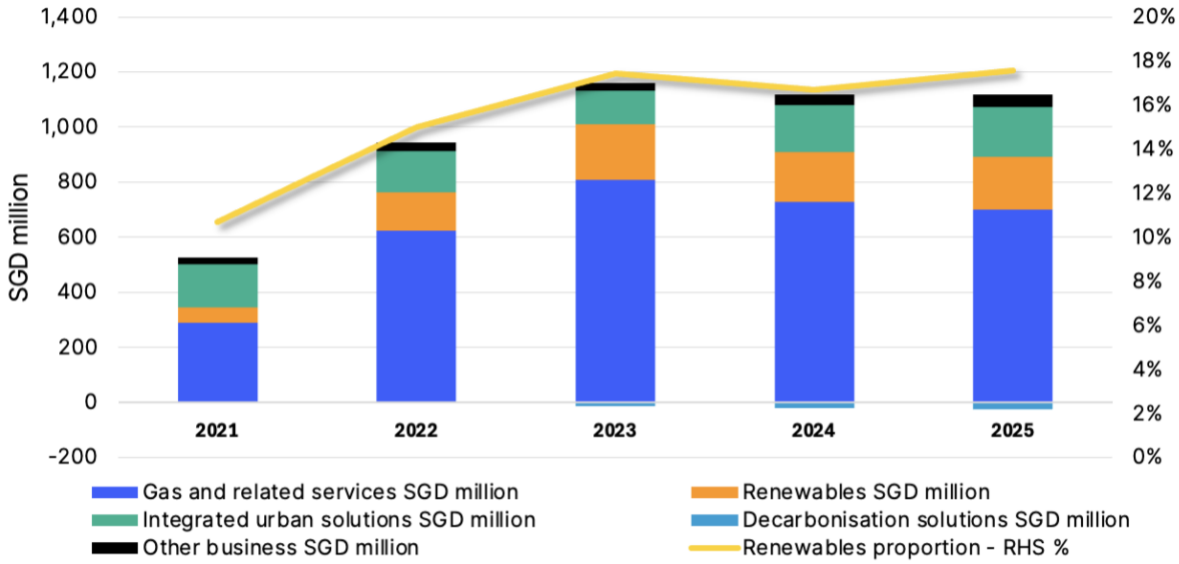
Figure 13: Sembcorp Industries financial performance

A. Revenue composition by segment



Source: Company's financial report.

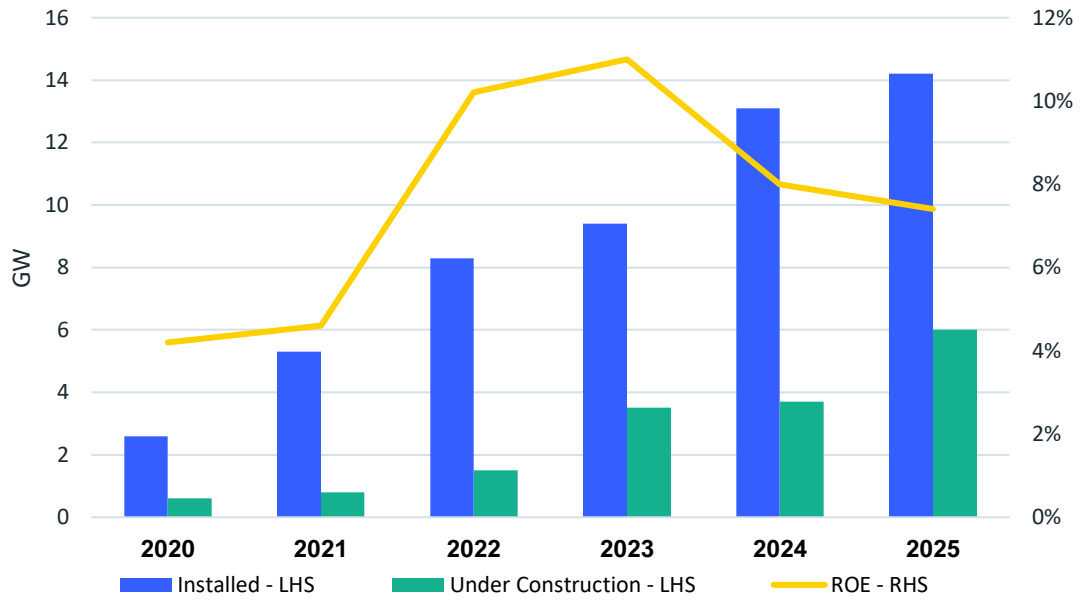
B. Net profit composition by segment



Source: Company's financial report.

IEEFA estimates that in 2025, gas and related services accounted for approximately 71% of Sembcorp Industries' total revenue, but contributed only around 64% of profitability. In contrast, the renewable energy segment generated about 15% of revenue while accounting for approximately 18% of profitability. In terms of net profit margins from continuing operations, renewable energy outperformed gas and related services, with margins of approximately 22% compared to 17% for gas.

Figure 14: Sembcorp Industries' renewables capacity versus return on equity (ROE)



Source: IEEFA analysis.

Sembcorp Industries increased its renewable energy return on equity (ROE) from 4.2% in 2020 to 7% in 2025. However, ROE declined from 11% in 2023 to 8% in 2024, largely due to output curtailment in China and weaker wind conditions in India. Ongoing capacity expansion also impacted returns, as capital was deployed into assets not yet fully operational, while newly commissioned projects contributed for only part of the year.[66] ROE declined further to 7% in 2025, reflecting projects still under development and not yet generating returns.[67]

Assuming full-year contributions from all operational projects and excluding provisions related to receivables, the normalized ROE would be approximately 10.8%.[68] This suggests that the negative impact of curtailment and weaker wind conditions on returns is relatively limited and likely temporary.

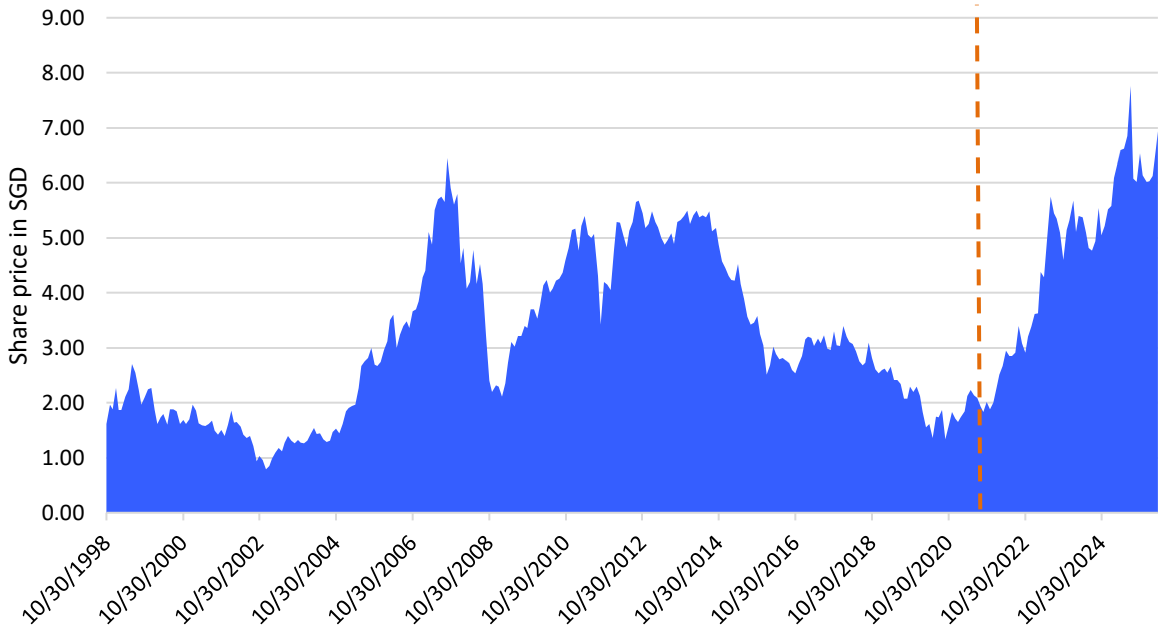
Although renewable energy investments typically require higher upfront capital expenditure per unit of capacity, they benefit from significantly lower operating costs. As a result, renewables generally achieve a lower levelized cost of electricity (LCOE) than conventional energy.[69] Consequently, renewable energy investments can offer more attractive and stable returns compared to traditional energy assets.

Since adopting a focused energy transition strategy in 2020, Sembcorp Industries' stock price has increased significantly, rising by approximately 217% from 2021 levels to SGD6.93. This growth

[66] Sembcorp Industries Ltd. FY2024 Results Announcement. 27 February 2025
[67] Sembcorp Industries Ltd. FY2025 Results Announcement. 25 February 2026
[68] Sembcorp Industries Ltd. FY2024 Results Announcement. 27 February 2025.
[69] Lazard. Lazards LCOE+ June 2025. June 2025.

aligns with its strategic shift toward sustainability and reflects improved investor confidence in its clean energy expansion and regional growth prospects.

Figure 15: Sembcorp Industries stock price



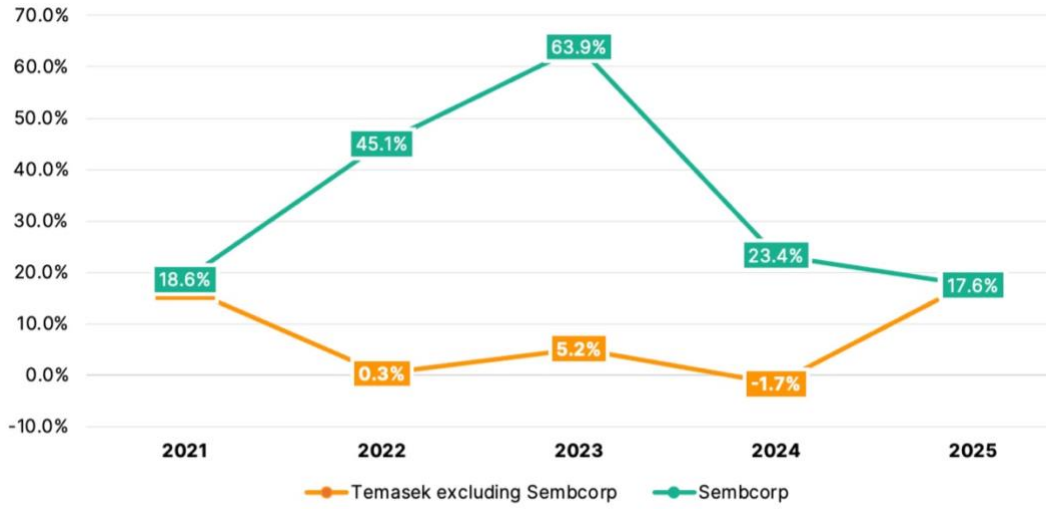
Source: IEEFA.

Temasek holds a 50% stake in Sembcorp Industries. The remaining shares are held by institutional investors (24%), retail investors (15%), and shareholders holding fewer than 250,000 shares (11%).[70] Investor confidence appears to be improving, supported by a steady rise in dividend payments since 2021. The company increased its dividend from SGD0.05 per share in 2021 to SGD0.25 per share[71] in 2025, reflecting stronger cash flow generation. This trend suggests that Sembcorp Industries' renewable energy investments are delivering stable and growing returns to shareholders.

Sembcorp Industries has also outperformed Temasek over the past four years. Temasek's portfolio returns, excluding Sembcorp Industries, are shown in Figure 16. Strengthening investor confidence may also enhance the company's ability to access external funding on more favorable terms.

[70] Sembcorp Industries. Sembcorp Industries Annual Report 2025.14 April 2026
[71] Sembcorp Industries. Sembcorp Industries Annual Report 2025.14 April 2026

Figure 16: Year-on-year returns: Sembcorp Industries versus other Temasek portfolios



Source IEEFA analysis based on Temasek's major investment review.

Insights from Temasek's experience: Renewables as a strategic path for Danantara

Temasek has demonstrated that Singapore, despite its resource constraints, can play a leading role in the energy transition by acting as both financier and customer of large-scale renewable energy infrastructure. Sembcorp Industries' strong performance further underscores that expanding into clean energy can strengthen financial performance, boost investor confidence, and drive corporate growth.

For Danantara, two key takeaways emerge:

- Embedding sustainability in its portfolio strategy could ensure resilience, long-term value creation, alignment with global decarbonization trends, and strengthened national energy security.
- Leveraging regional collaboration with Temasek and the other regional actors could mobilize the investment needed to accelerate national energy transition goals. A meeting between Danantara and Temasek in April 2026 signals an opportunity to expand collaboration into financing platforms, technology transfer, and cross-border renewable projects.[72]

[72] Petromindo. Danantara, Temasek explore broader clean energy and investment cooperation. 24 April 2026.

Danantara's energy transition: current position

One year after its establishment, Danantara, through DAM, has made progress in supporting the operational and financial performance of SOEs. This assistance includes providing a USD405 million shareholder loan to Garuda Indonesia and IDR4.9 trillion to Krakatau Steel.[73]

In terms of restructuring, Danantara has overseen several major consolidations. These include the merger of four state port operators into Pelindo, the formation of MIND ID to group state-owned mineral and coal producers, the restructuring of state insurers under Indonesia Financial Group (IFG), and the consolidation of plantation companies into a single holding company (PTPN).[74]

These measures aim to streamline operations, improve efficiency, and enhance financial performance. Progress indicates that Danantara is likely to play a central role in reducing fiscal vulnerabilities and enabling diversification, both of which will be critical to supporting the clean energy transition.

For DIM, investing in high-quality sustainable assets is a core objective, making diversification into such investments essential. This is reflected in its collaboration with ACWA Power to explore opportunities across Indonesia's energy and water sectors. However, the scope of the partnership extends beyond renewable energy, encompassing renewable generation alongside combined-cycle gas turbines (CCGT), green hydrogen, and water desalination projects.[75] While this reflects a broader energy transition approach, the inclusion of gas-fired power generation may increase exposure to fuel price volatility and transition-related risks. In addition, the viability of green hydrogen projects depends on access to sufficient renewable power capacity; without dedicated renewable integration, their low-carbon credentials and long-term competitiveness may be constrained.

Beyond those identified above, Indonesia presents further opportunities for energy transition investment, particularly in renewable energy and EVs. Recent developments include:

- Through DIM, Danantara signed a Head of Agreement (HoA) with PLN in December 2025 to accelerate renewable energy development.[76]
- Danantara plans to build a manufacturing facility to support a 50GW solar program, financed by a USD1.4 billion (IDR 23.66 trillion) investment.[77]
- Danantara has drawn on a USD10 billion credit line to finance green projects, such as a USD800 million domestic EV-battery chemical plant (announced in June 2025).[78]
- Danantara is co-investing with the QIA and CIC in Indonesia's renewable-energy industries.[79]

[73] SPGlobal. Indonesia's SOE Shake-Up Spurs Growth Potential. 16 April 2026.
[74] Jakarta Globe. Danantara Says SOE Consolidation Based on Fundamentals, Not Arbitrary Cuts. 28 January 2026.
[75] Antara News. Indonesia's Danantara, ACWA Power sign $10 bln deal on green projects. 3 July 2025
[76] Jakarta Globe. Danantara, PLN Sign Deal to Accelerate Indonesia's Renewable Energy Push. 22 December 2025.
[77] IDN Financial. Danantara expedites 50 GW PLTS factory with USD 1.4 billion investment. 6 March 2026.
[78] Invest Indonesia. Danantara, INA Invest in Chandra Asri's Chemical Plant. 18 June 2025.
[79] IDN Financials. Danantara accelerates SOE restructuring, eyes USD 5 billion investment. 15 July 2025.

Despite ambitious plans and announcements on energy transition investment, progress has remained slow.[80] Danantara has recently focused on developing waste-to-energy (WtE) projects across Indonesia. This is reflected in the establishment of Denera in April 2026, which is dedicated to WtE development. Under the proposed structure, Denera is expected to hold a 30% equity[81] stake in each WtE project tendered by Danantara, with total investment requirements estimated at approximately USD5.2 billion to develop 33 WtE plants nationwide.[82]

However, WtE projects typically have longer development timelines than other renewable energy technologies. The construction phase alone can take approximately four to seven years.[83] For example, the Surakarta WtE project took six years to become operational and remains at an initial phase.[84] This extended development cycle may delay revenue realization and cash flow generation, potentially affecting the overall investment profile compared with faster-to-deploy technologies such as utility-scale solar projects that may only take 6 to 12 months to complete.[85] Therefore, careful consideration is required as project economics may be less favorable than alternative investments.[86]

Table 10 outlines the key initiatives currently underway in Danantara. Renewables and their enabling infrastructure are not prioritized for investment, unlike other SWFs, where clean energy is central to portfolio strategy.

[80] Indonesia Business Post. Danantara's fossil energy project funding poses economic risks: CERAH. 19 March 2025.
[81] Antara News. Danantara bentuk PT Denera, fokus proyek "Waste to Energy". 9 April 2026.
[82] Kumparan.com. Proyek Sampah Listrik Danantara Tarik Investor Dunia, Batch II Dibuka Lebih Luas. 27 February 2026.
[83] EPC Intel. Waste-to-energy plants: The timeline from concept to startup. 30 September 2024.
[84] PwC. Waste-to-energy-plant: Jakarta has not given up. 18 June 2025.
[85] IEEFA. Slides Renewables Asia Presentation | Net zero by 2050 - are we placing the right bets now for a profitable and carbon-free future?. 23 September 2025.
[86] PV Farm. Utility-Scale Solar Project Development Stages: The Complete Timeline from Site Selection to COD. 26 February 2026.

Table 10: Danantara's key projects portfolio

Project	Description	Investment Value	Implementing Agency
Downstreaming[87]	The initiative comprises six projects across multiple sectors, including energy, mining, agriculture, and downstream processing, with the objective of transitioning Indonesia from a raw material exporter to a value-added product exporter.	USD7 billion	Various SOEs in the relevant sector
Wamena	The development of waste-to-energy (WtE) facilities across 33 cities is expected to generate a tenfold economic multiplier effect.	USD5.2 billion	Denera
Cordova	The establishment of caustic soda production facilities is intended to support downstream industrialization, with an estimated fivefold multiplier effect.	USD758 million	Unidentified
Fukuoka	The development of a data center platform, in partnership with a global operator, is projected to create a sixfold multiplier effect.	USD1.2 billion	Unidentified
Johor	Investment in the agriculture sector is expected to generate a twofold multiplier effect, contributing to broader economic value creation.	USD4.9 billion	Unidentified

Source: Antara News. Danantara siap investasi empat proyek total senilai Rp202,4 T di 2026. 13 February 2026.

Global energy transition investment continues to accelerate, reaching a record USD2.3 trillion in 2025. Electrified transport accounted for the largest share at USD893 billion, followed by renewable energy (USD690 billion) and grid infrastructure (USD483 billion), reflecting a broader shift toward electrification and system integration.[88] Regionally, the Asia Pacific remained the largest market,

[87] Diskominfo Kabupaten Mempawah. Danantara Resmikan Groundbreaking 6 Proyek Hilirisasi Nasional, Investasi Tembus Rp110 Triliun. 7 February 2026.

[88] BloombergNEF. BloombergNEF Finds Global Energy Transition Investment Reached Record $2.3 Trillion in 2025, Up 8% from 2024. 26 January 2026.

while the European Union (EU) recorded the strongest growth among developed markets, expanding 18% year-on-year.

This trend suggests that while domestic constraints may limit near-term opportunities in Indonesia, international energy transition assets, particularly in mature markets, offer increasingly attractive alternatives. Supporting domestic investment will require Danantara to play a pivotal role in advancing clean energy projects within its portfolio. This includes encouraging PLN to expand renewable energy tenders while simultaneously reducing reliance on fossil fuels.

> **Several SWFs have issued green bonds and leveraged blended finance to scale clean energy investments. Once Danantara establishes a robust pipeline of credible clean energy projects, there may be potential to issue green bonds to lower capital costs. At this stage, however, developing that pipeline remains critical.**

In developed markets, operational renewable energy portfolios are typically expected to generate annual returns of around 8.5%–10% on a buy-and-hold basis. While these renewable assets remain exposed to risks such as inflation, resource variability, technology performance, and geographic concentration, these challenges can be mitigated through tariff indexation and diversification across technologies and markets, supporting more stable long-term returns. Additional revenue generation opportunities are available in scalable technologies such as solar and storage. Moreover, several SWFs have issued green bonds and leveraged blended finance to scale clean energy investments. Once Danantara establishes a robust pipeline of credible clean energy projects, there may be potential to issue green bonds to lower capital costs.[89] At this stage, however, developing that pipeline remains critical.

Conclusion

Danantara's establishment marks a pivotal moment in Indonesia's economic trajectory. As the world's eighth-largest SWF, managing approximately USD900 billion, it has the scale to influence both domestic fiscal policy and investment flows. However, scale alone does not guarantee sustainability. The fund's reliance on SOE dividends, particularly from energy companies dependent on subsidies, creates structural vulnerabilities that threaten its long-term viability.

The analysis of two major SOEs, Pertamina and PLN, reveals the depth of these challenges. Regulated fuel prices, import dependence, and operational inefficiencies erode Pertamina's profitability. PLN faces similar constraints. The profitability of both companies is largely sustained by government subsidies that mask underlying financial weaknesses. Without these fiscal transfers, the SOEs' would record negative net income, eliminating their capacity to pay dividends to Danantara.

[89] Faster Capital. Green bonds: What are green bonds and how to raise debt capital and support green projects. 2 April 2025.

This dynamic undermines the SWF's mandate to generate sustainable non-tax revenue and raises concerns about the feasibility of achieving the IDR800 trillion dividend target.

The broader implication is clear: Indonesia's fiscal resilience cannot be built on a foundation of subsidy-dependent dividends. Instead, structural reforms are essential. These reforms must focus on reducing subsidy dependence, improving operational efficiency, and transitioning toward renewable energy. By doing so, energy SOEs can evolve from fiscal liabilities into reliable contributors to Danantara's portfolio.

In terms of investment strategy, global experience provides a roadmap for Danantara to adopt a long-term, sustainability-oriented approach that prioritizes resilience over short-term fiscal targets. From Temasek, the key insights are twofold: first, sustainability must be embedded into the portfolio strategy, ensuring resilience, long-term value creation, alignment with global decarbonization trends, and support for national energy security. Second, regional and international collaboration is essential to mobilize investment at the scale that Indonesia's energy transition requires. Partnerships with Temasek and other Association of Southeast Asian Nations (ASEAN) actors offer a starting point, while collaboration with SWFs from the MENA and East Asia regions could provide complementary financing.

Danantara's institutional design offers mechanisms for achieving this transformation. Through DAM, SOE consolidation and restructuring can reduce inefficiencies and unlock value. Through DIM, global partnerships can mobilize capital for strategic projects, particularly in renewable energy. These initiatives align with Indonesia's Golden Vision 2045, which envisions economic sovereignty, social welfare, and sustainable development. Crucially, they also strengthen Indonesia's efforts to achieve energy security and an 8% economic growth target.

The following recommendations can enhance Danantara's role and advance Indonesia's energy transition.

Driving portfolio diversification into renewables

A critical driver for fiscal resilience is diversification into renewable energy. Danantara should encourage SOEs, particularly PLN, to expand into solar, wind, and battery storage. These technologies typically deliver lower operating costs, stronger margins, and can generate revenue in less than two years. While renewables can face resource variability, the financial deviations are relatively contained compared to those in fossil fuels. By embedding renewables into its portfolio, Danantara can reduce subsidy dependence, enhance profitability, and strengthen long-term dividend capacity.

Accelerating EV ecosystems

Danantara should actively support Indonesia's EV transition by investing in:

- Battery manufacturing and recycling to reduce import dependence and capture value chains

- Charging infrastructure expansion, ensuring nationwide accessibility and integration with renewable energy grids
- Public transport electrification, particularly buses and logistics fleets, to reduce urban emissions and fuel subsidies

EV adoption not only reduces oil import exposure but also creates new industrial growth opportunities, positioning Indonesia in the global EV supply chain. By aligning SOEs and private partners with EV investments, Danantara can catalyze both fiscal resilience and industrial competitiveness.

Enabling carbon market solutions

Danantara can play a catalytic role in advancing credible carbon markets. This includes purchasing carbon credits to offset portfolio emissions and investing in high-integrity carbon projects, particularly renewable energy, energy efficiency, nature-based solutions, and industrial decarbonization technologies.

Drawing on Temasek's example, Danantara could strengthen portfolio assessment by applying internal carbon pricing to investment decisions. New standards can account for improved base investment returns and the use of carbon market instruments to incentivize emissions reductions across its portfolio.

To achieve this, robust carbon accounting should be implemented across all SOEs. Additionally, Danantara could collaborate with Temasek in programs such as TRACTION to accelerate coal retirement by leveraging transition credits, further aligning its portfolio with long-term sustainability goals.

Establishing climate financing platforms

Danantara should leverage existing blended finance mechanisms, such as the Just Energy Transition Partnership (JETP), and expand into green bonds. A layered financing approach — combining concessional capital, commercial investment, and risk-sharing instruments — can mobilize capital across different risk-return profiles and project stages. This can help address financing gaps in Indonesia's energy transition while attracting global investors seeking credible green investment opportunities.

Integrating transmission infrastructure for clean energy

Scaling renewable energy requires robust infrastructure. Investment in grid upgrades, transmission expansion, and cross-border interconnections will be critical to reduce bottlenecks and enable efficient renewable integration.

Currently, Indonesia and Singapore have agreed to a major renewable energy partnership, aiming to export up to 3.4GW of solar-generated electricity from Indonesia to Singapore by 2035. However,

PLN's control over generation, transmission, and distribution, combined with resistance to separating these functions, has constrained private investment. This also makes it more challenging to establish the open grid access required for regional electricity trade.

Danantara is uniquely positioned to facilitate the collaboration, mobilize capital, and drive the structural reforms needed to ensure success. Indonesia stands to gain substantial benefits from the electricity export plan, including projected annual foreign exchange earnings of at least USD4.2 billion and additional tax revenue of USD210 million annually.[90]

Tailored transition planning

Danantara could adopt a differentiated transition strategy, similar to Temasek's Climate Transition Readiness Framework, to assess each portfolio company's preparedness for decarbonization. Rather than applying uniform policies, transition pathways should be tailored to each company's maturity level and sectoral context. Companies demonstrating higher readiness could be supported through deeper ESG integration and accelerated implementation measures, while those at earlier stages would benefit from capacity-building initiatives and phased transition support. This ensures that the energy transition is both pragmatic and equitable across the portfolio.

Ultimately, Danantara's success will be measured not by the scale of its assets but by the sustainability of its revenue model. If Indonesia can successfully reorient its SOE ecosystem toward profitability and long-term resilience, Danantara could become a cornerstone of fiscal stability and a catalyst for the clean energy transition.

[90] IEEFA. Maximizing reciprocal benefits from Indonesia's green electricity export to Singapore. 6 March 2025.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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